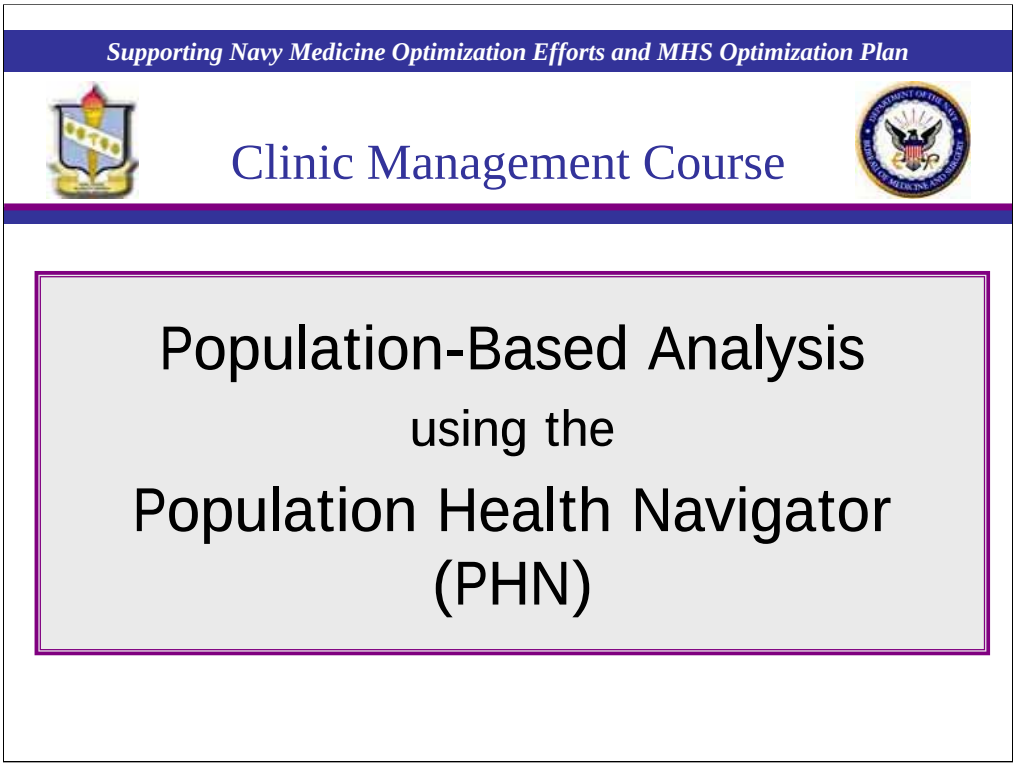



The PHN is a web-based report program that can help you manage your population by providing demographics, clinical preventive services needs and disease/condition management information.

It can help answer questions like:

How many diabetics are enrolled in your clinic?

How many are in compliance with your clinic goals for HbA1c?

Who are the diabetics who have the worst compliance?

What about Asthmatics? Do you know who your Asthmatic patients are?

Are they draining clinic dollars by using emergency room services?

Who are the patients with depression? This is a tough on because they can get services out in town and the PCM may not even know.

And what about high utilizers? When you see your list you will probably recognize some names. Could any of these benefit from case management?

## Objectives

# Population Health Navigator

- Understand how to leverage PHN for:
  - Demographics
  - Clinical Preventive Services
  - Disease/Condition Management
- Understand relationship of Population Health Clinical Metrics and the BUMED Business Plan
- Understand the significance of HEDIS® measures
- Demonstrate use of the PHN for your specific MTF population and how to compare your clinical performance.

Population Health Navigator (PHN)

# About PHN?

- Web-based information and report application developed by the AF and now used throughout the MHS.
- Provides Action/Prevalence Lists for 14 Clinical Preventive Services and specific diseases/conditions.
- Provides HEDIS® measures to compare clinical quality of delivered healthcare.

The PHN will give you lists of your patients who have diabetes, asthma, depression…..a total of 10 diseases and four clinical preventive services. They tell you the patient's name, provider, some tests results, and contact information

Current Status

## Population Health Navigator

- MHS Population Health Portal, adapted for Tri-Service use, new program implemented Jan 04.
- All Navy commands currently have PHN users. Many branch clinics also have users.
  - currently >200 users
- Selected by BUMED as the Medical Informatics Tool to be used by MTFs

## Population Health Navigator (PHN)

### Summarizes data from . . .

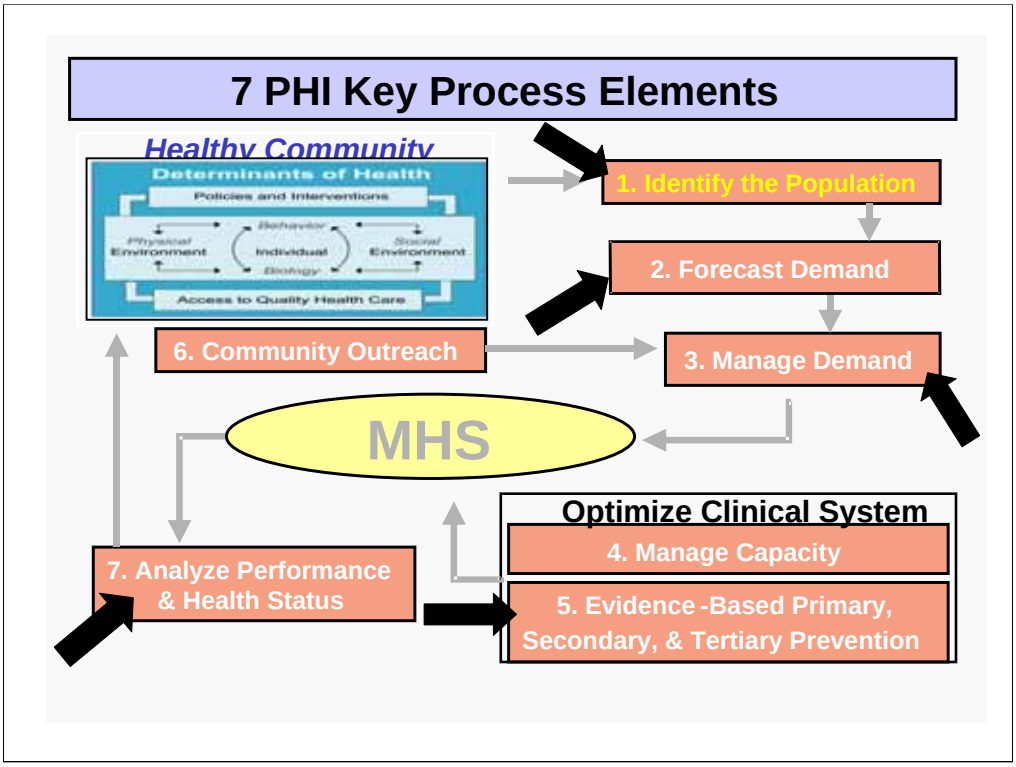
- M2
  - Standard Inpatient Data Record (SIDR)
  - Standard Ambulatory Data Record (SADR)
  - Health Care Service Reports (HCSR)
  - Pharmacy Data Transaction Service (PDTS)
- Approximately 103 CHCS hosts
- Defense Eligibility Enrollment Registration System (DEERS)
- Updated Monthly

Because data is pulled from DEERS and all CHCS hosts, the system pulls patients based on enrolled facility but will pull visits, lab and radiology tests regardless of where the test was performed.

PDTS data is pulled for pharmacy encounters so MTF, Network, and Mail Order Pharmacy prescriptions will be reflected. Again, the Methods define what is considered a prescription refill.

Importance of data accuracy. Data pulled is what's entered…. therefore the data is only as good as your coding, end of day reports, etc.

The data will be updated monthly but, because of where it is retrieved from, some of the data is 2-3 months old when it appears on the web. You will see that much of the data is from your CHCS host….this data is the most current. Data coming from M2 for purchased care in the network is usually behind several months because of delays in the billing process.




Everyone has seen this slide before….

The PHN can be used to:

**Identify the Population:** Entire population can be listed, broken out by provider, provider groups, and clinical preventive services required for a specific age group

**Forecast Demand:** Is dependant on accurate identification of your population, knowing the healthcare needs and disease prevalence of the population, and being able to anticipate the number of preventive services

**Manage Demand:** In order to assess, monitor and encourage the appropriate delivery of services, it is important to track preventive services needed/provided and track current utilization of healthcare. Individuals at risk of under- or over-utilization can be targeted for intervention. The High-Utilizer module is an effective tool to target individuals who might benefit from case management or education as to self-care strategies, health promotion and prudent primary care access.

**Evidence-Based Primary, Secondary, and Tertiary Prevention:** Goal is to manage the health of individuals and populations with a focus on prevention of illness and injury. All stems from knowing your population and initiating the clinical preventive services to keep them well. If they already have diseases, managing the disease to prevent progression. You may look at your diabetics and determine where your patients could benefit from a Clinical Practice Guideline.

**Analyze Performance and Health Status:** You may have already seen the graphs that BUMED is using to evaluate clinical practice. This information is taken from the PHN and is one example of how the data can be utilized.

## MHS Population Health Portal

# Population Health Navigator

### Strengths

- Provides both corporate level (HEDIS®) metrics and drills to patient/provider/clinic level
- Provides data on patient care regardless of where care provided:
  - throughout entire MHS
  - inpatient & outpatient care
  - network & MTF care
- Can be displayed in Excel® for easy use of data.

### Limitations

- Updated monthly, 4-6wk lag time.
- Some delay in posting of network care.
- Does not include non-enrolled beneficiaries
- Only predefined modules, not able to query

## HEDIS® metrics

# Population Health Navigator

- Health Plan Employer Data and Information Set®
- Set of standardized performance measures to compare the performance of healthcare plans.
- Does not represent the standard of care, merely the standard of clinical quality for comparison to other facilities.
- Very precise definition based on: continuous enrollment, inclusion/exclusion criteria, age restrictions, etc.

## Sensitive & “For Official Use Only”

# Security Awareness

- Command approval for access to the PHN
- Must read and accept the Security Requirements prior to entering the site
- Output products that contain sensitive data are marked with privacy caveat

The data contained in the navigator are sensitive and “For Official Use Only”. Data should be safeguarded and protected much like you would a medical record or confidential document. Since the data are “on the web” , heightened security awareness is essential.

Let’s review a few requirements. I know you are all aware of these but it’s important to review them every now and then.

•Recommend always having your screen saver set to go on automatically if you are away from your desk. Even if you are only walking away for a brief period, it is essential that patient information be safeguarded

•If you print data with patient information on it, be sure it is kept in a secure location.

•Don’t download to a medium that cannot be protected

•Protect your Client Certificate. Don’t “share” your password with others

•Also, NEVER select the option of having the system remember your password when using a secure system.

As an additional security measure, PHN times out if not used for a period of time.

MHS Population Health Portal

# Population Health Navigator

## Major “Index Card” Sections :

- Demographic Information
- Preventive Services
- Disease and Condition Management
- Administration

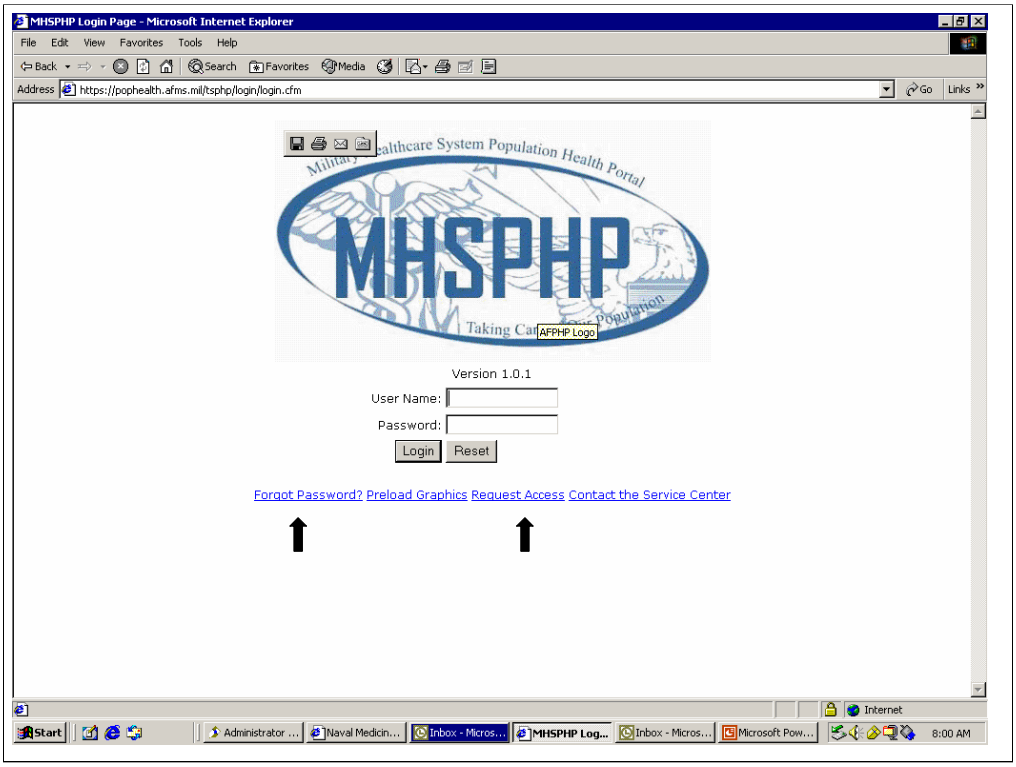
PHN is easy to navigate with four primary sections: demographics, preventive services, disease/condition management and administration.

•The Demographics section provides facilities an aggregate view of their enrolled population stratified by age and gender.

•The Preventive Services section provides detailed methodologies, aggregate reports and provider level patient action lists for various screening procedures (e.g., breast cancer, cervical cancer, cardiovascular risk factors, etc.).

•The Disease/Condition Management section provides detailed methodologies, aggregate reports and provider level patient action lists targeting patients with coded diagnoses for numerous diseases/conditions (e.g., asthma, diabetes, high utilizers, etc.).

•The Administration tab contains downloadable administrative data and contact information. It contains documents including a consolidated methodology manual, user’s manual, frequently asked questions, and solutions to commonly encountered data quality issues.

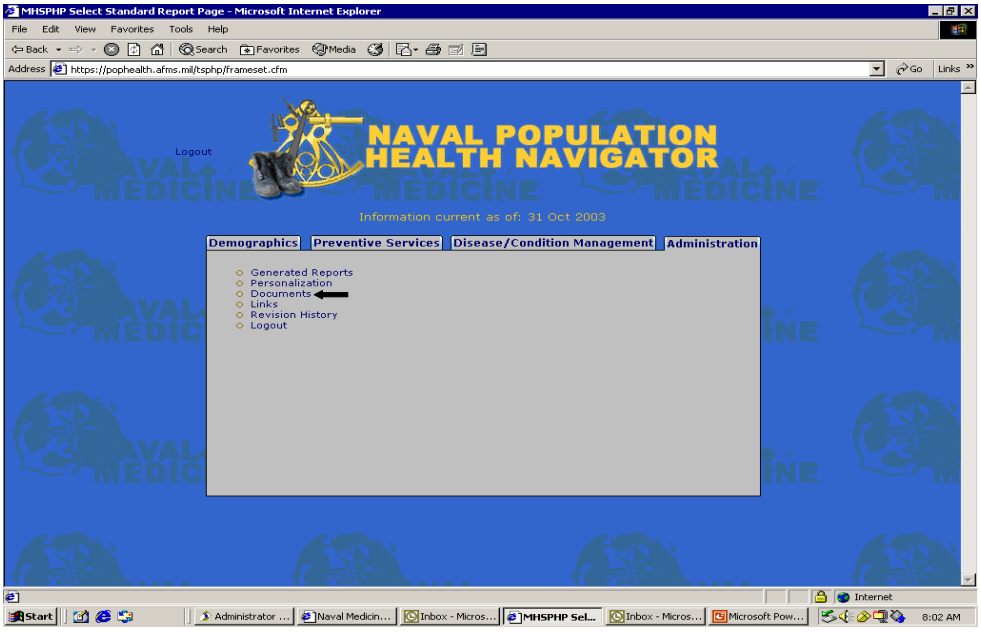



The most important items on the home page are the “request Access” tab and “Forgot Password”

The “Request Access” tab is the starting point for getting a PHN account. When you submit a request, it will be sent to the Navy account administrator who will notify you of any additional requirements needed for an account. Once all requirements are met, an account will be established.

When you submit the request, it is important to copy the page acknowledging the submission. This page contains your user name.

# Administration




In the Administration tab there are several items:

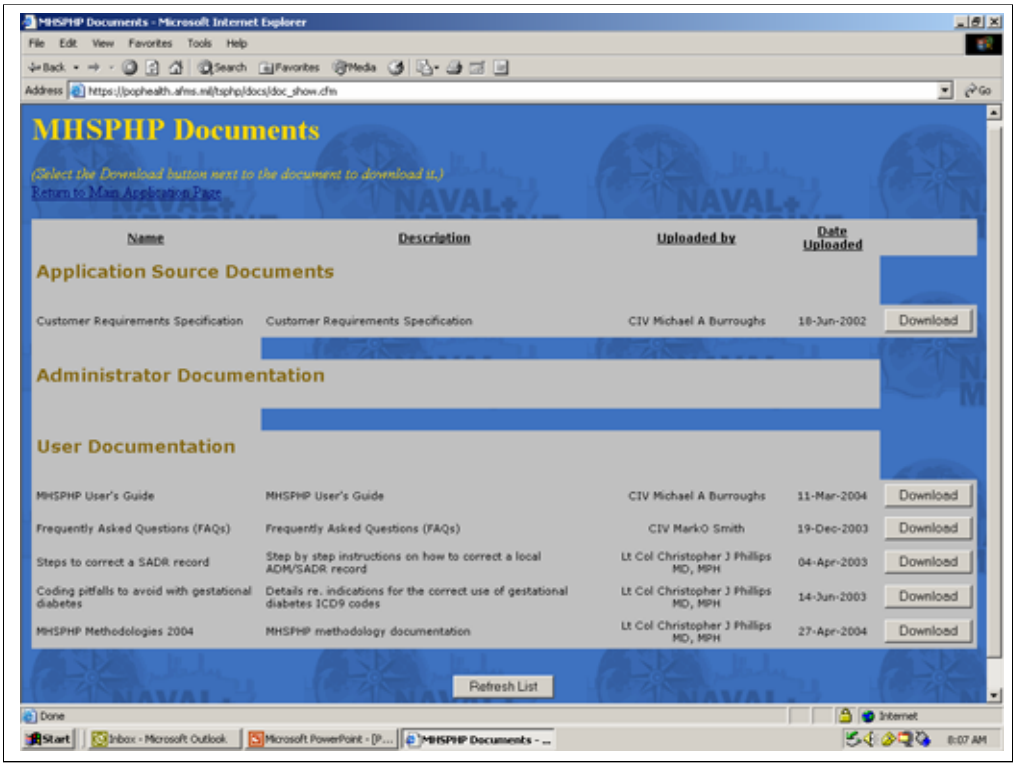
Generated reports: This is where you will find reports you have requested while using the program

Personalization: For changing password, etc. Passwords should be changed every 90 days

Documents: Contains User's Guide, methodology, and other helpful documents. Discussed on next slide

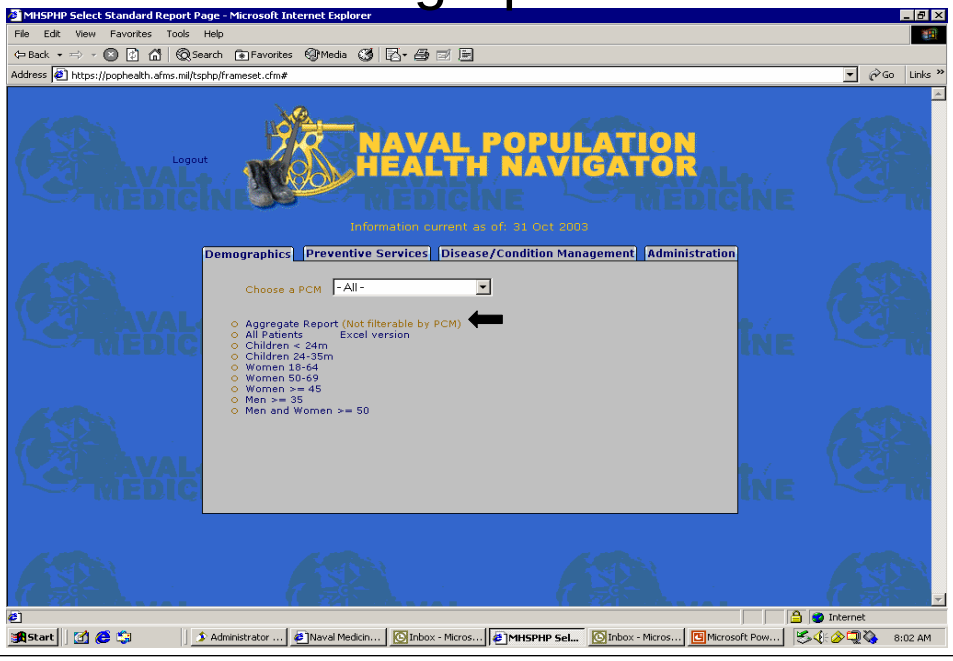
Links

Logout: It is always recommended that you logout of the program. There are logout buttons throughout

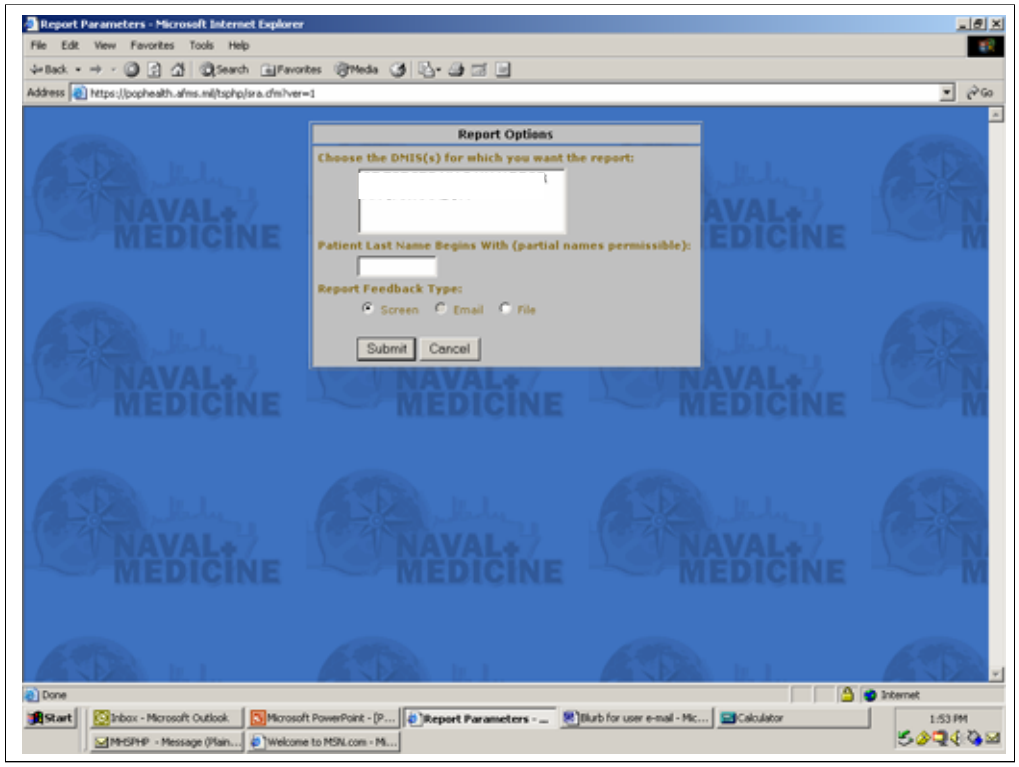



This section contains a User Guide and Methods for the metrics. It is recommended that these documents be printed and used to guide you through the program. Frequently asked questions are extremely useful as you navigate through the program.

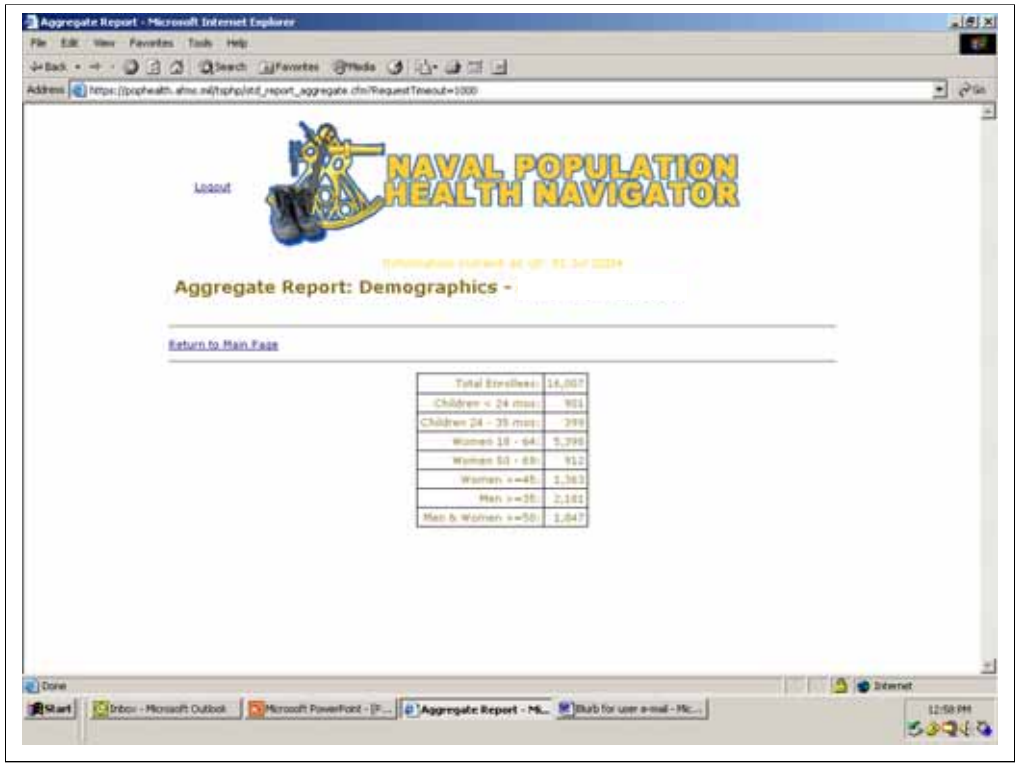
# Demographics



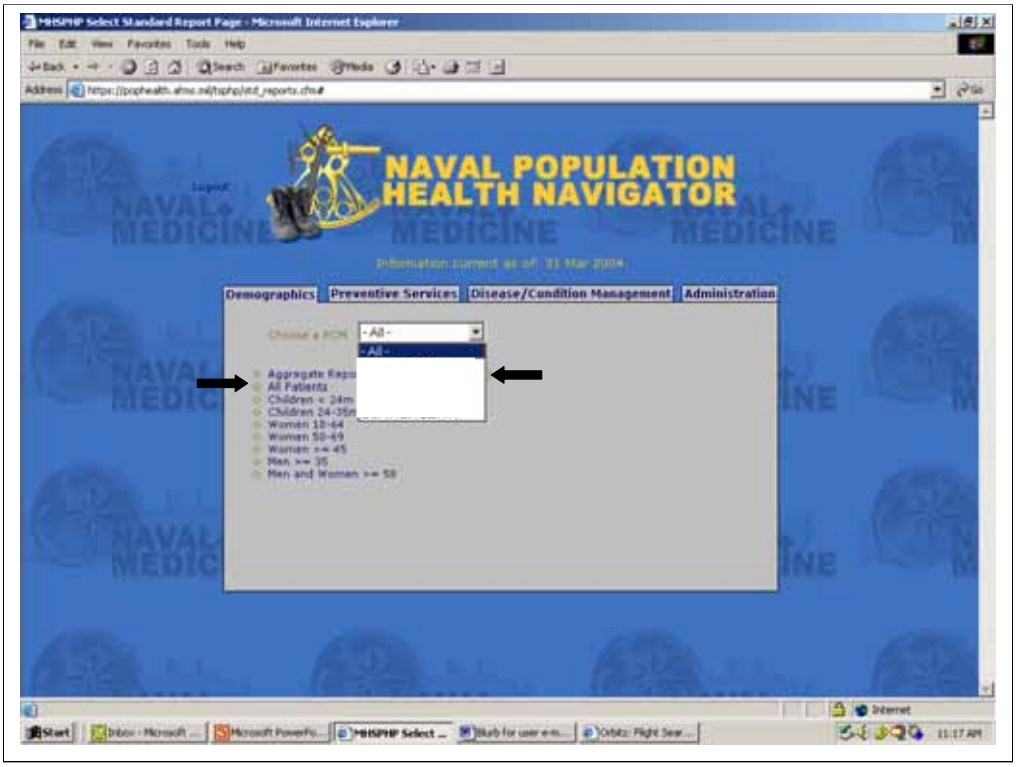

Demographics are available in aggregate report and patient lists.



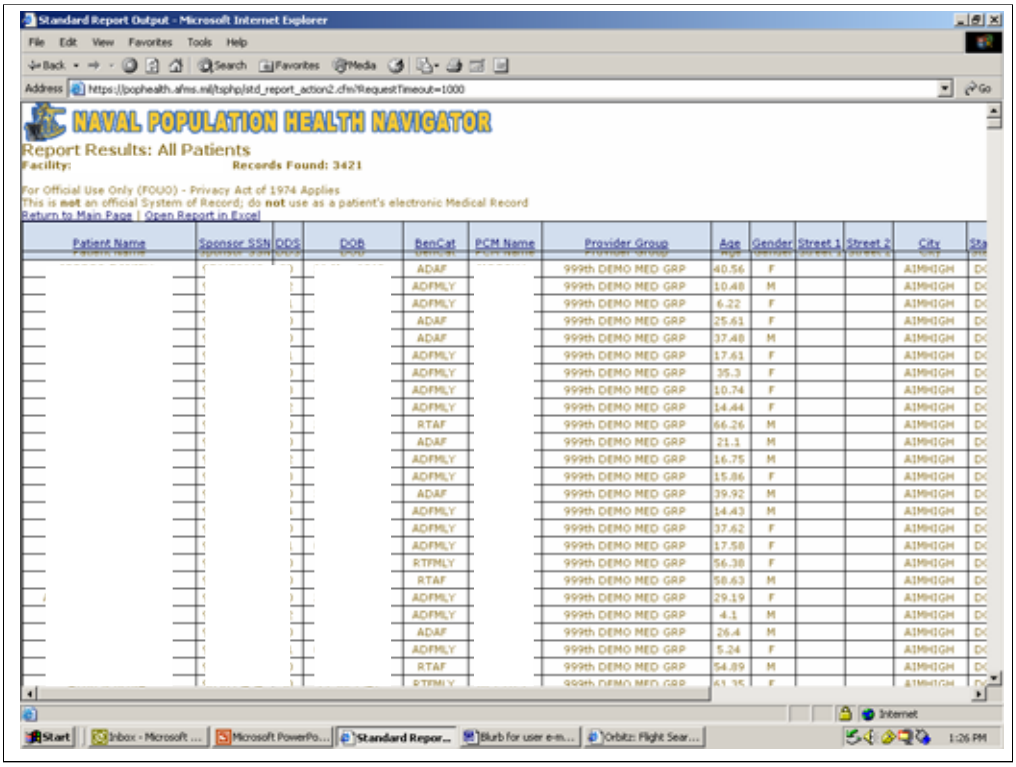

If you are a user from a Parent DMIS, you will have an option of selecting fields for either parent or child DMIS. You can also have the data pulled for later use. It can be found in “Generated Reports” in the Administration section.




The demographic groups are broken out by age group for specific clinical preventive services (breast cancer screening, cervical cancer screening, colorectal screening, etc).



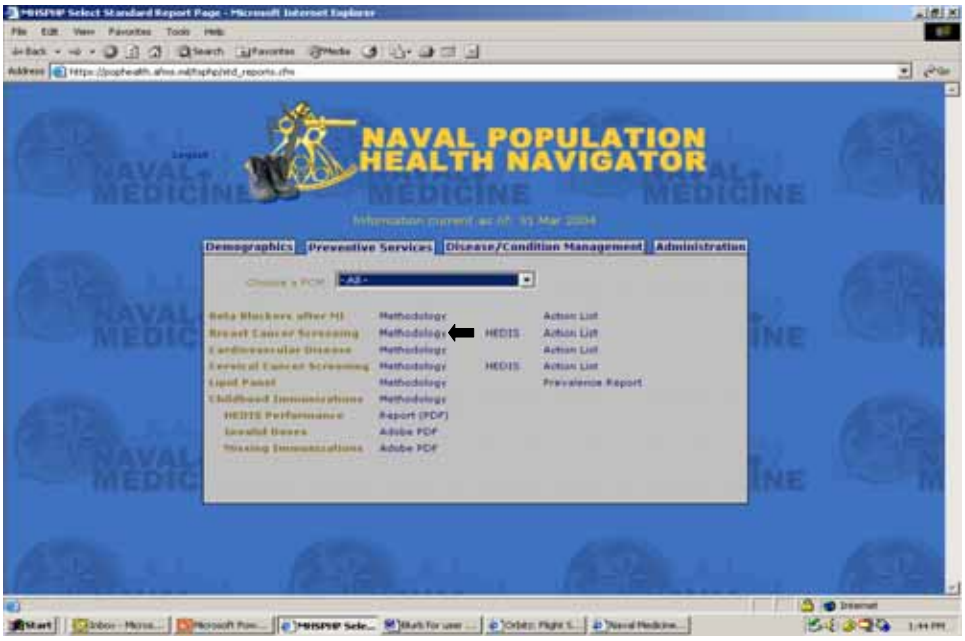

You may also select reports for a specific provider.




Information found in a report for all enrolled patients in the age group selected.

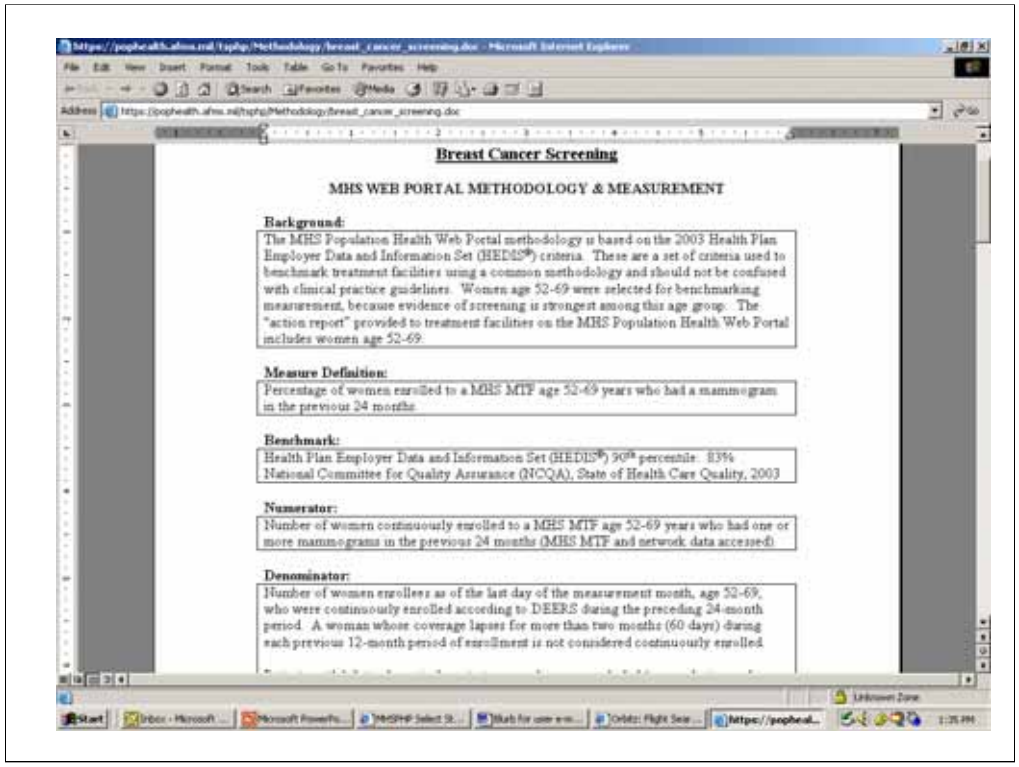
To return back to the original screen, use the “Return to Main Page” link above. If you use the Back button on the program’s tool bar, it may lock up and kick you out of PHN.

# Preventive Services




There are 5 Clinical Preventive Services listed in this section. The Immunization fields are not populated for the Navy.

The methodology will explain specifics for the information in a particular data set. These are the same as the Methods in the Administration section.



**Breast Cancer Screening**

**MHS WEB PORTAL METHODOLOGY & MEASUREMENT**

**Background:**

The MHS Population Health Web Portal methodology u based on the 2003 Health Plan Employer Data and Information Set (HEDIS®) criteria. These are a set of criteria used to benchmark treatment facilities using a common methodology and should not be confused with clinical practice guidelines. Women age 52-69 were selected for benchmarking measurement, because evidence of screening is strongest among this age group. The "action report" provided to treatment facilities on the MHS Population Health Web Portal includes women age 52-69.

**Measure Definition:**

Percentage of women enrolled to a MHS MTF age 52-69 years who had a mammogram in the previous 24 months.

**Benchmark:**

Health Plan Employer Data and Information Set (HEDIS®) 90th percentile: 83% National Committee for Quality Assurance (NCQA), State of Health Care Quality, 2003

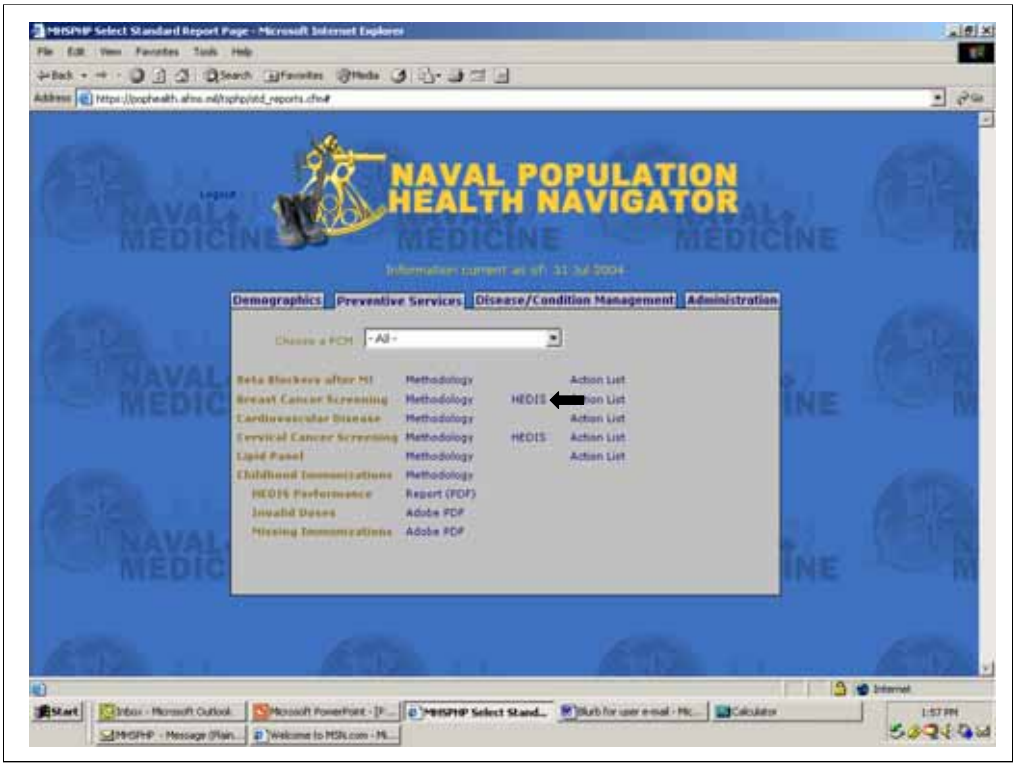
**Numerator:**

Number of women continuously enrolled to a MHS MTF age 52-69 years who had one or more mammograms in the previous 24 months (MHS MTF and network data accessed)

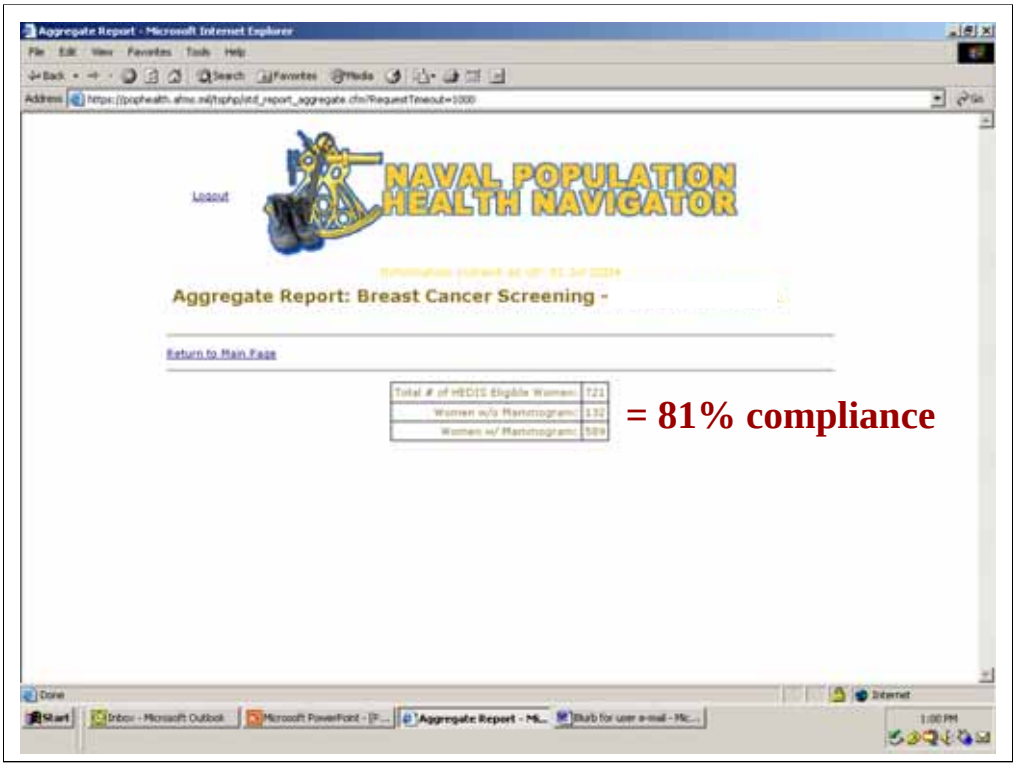
**Denominator:**

Number of women enrollees as of the last day of the measurement month, age 52-69, who were continuously enrolled according to DEERS during the preceding 24-month period. A woman whose coverage lapses for more than two months (60 days) during each previous 12-month period of enrollment is not considered continuously enrolled.

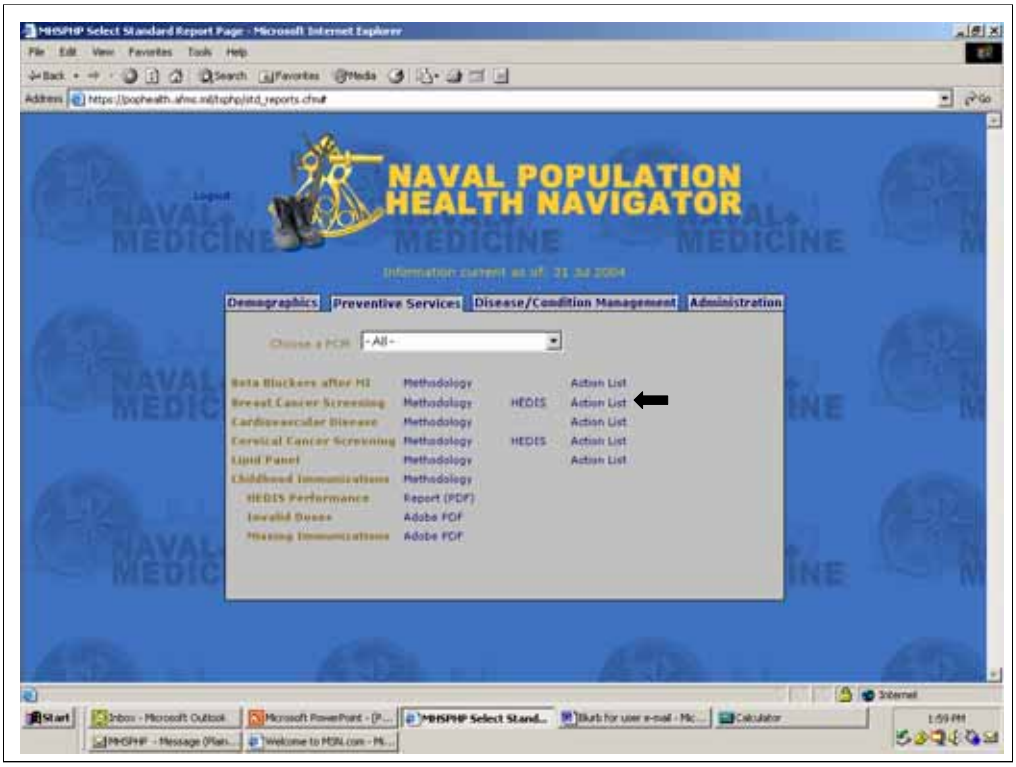
Sample methodology



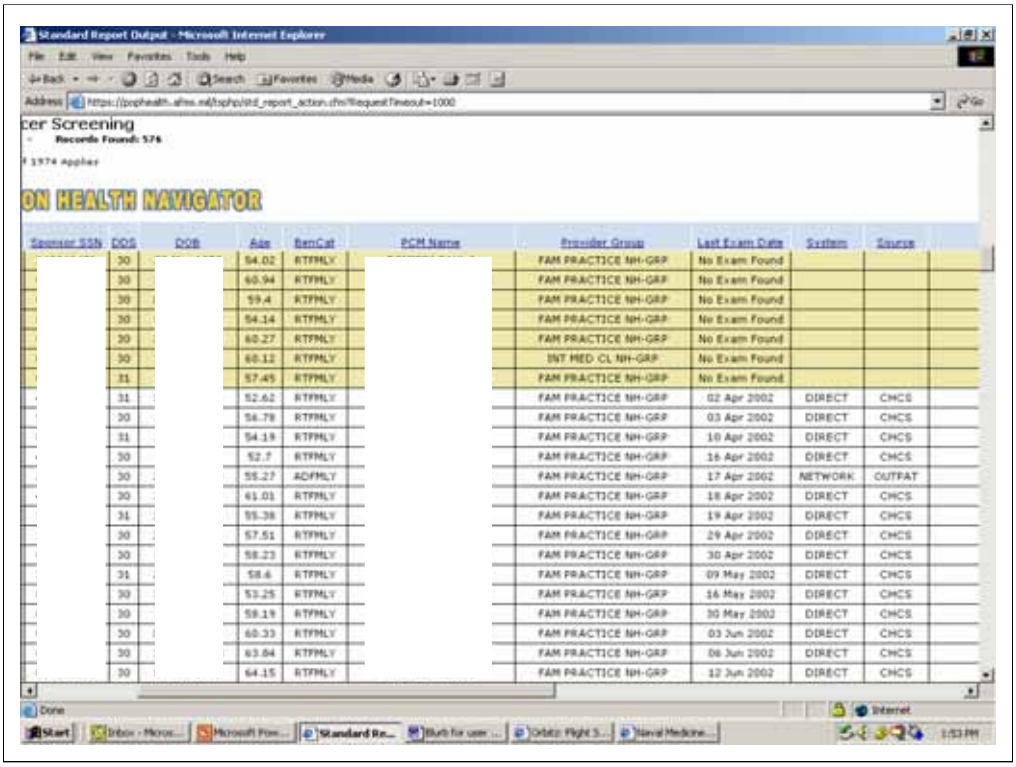

HEDIS is the data used in the clinical section of the BUMED Business Plan. The numbers for the BUMED Business Plan are taken directly from the PHN




Sample report demonstrating how to calculate % compliance

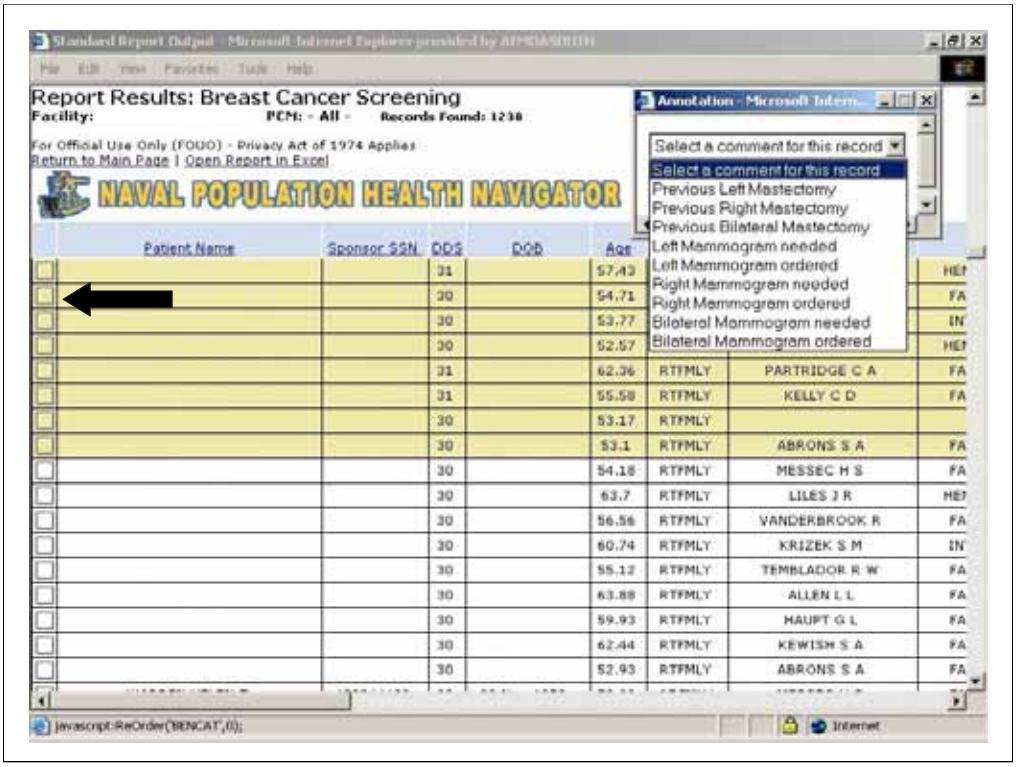



In addition to the HEDIS Report, there are action lists. The action list will always contain more patients than the HEDIS data, since the HEDIS is restricted to those that meet strict inclusion/exclusion criteria and are continuously enrolled. The Action List is more inclusive and contains all enrollees without the continuous enrollment requirement.



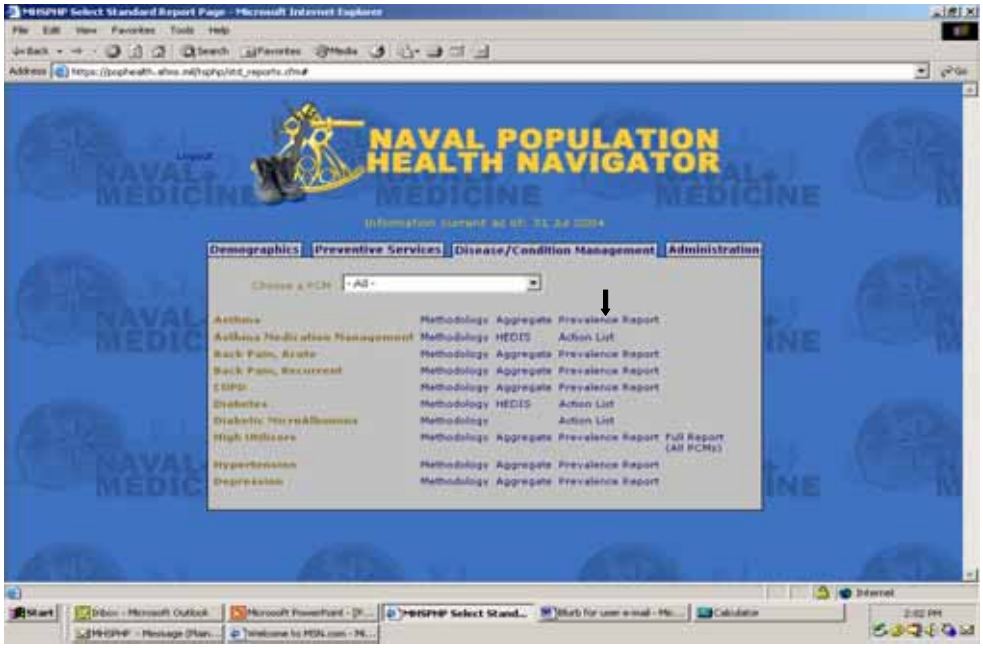

The patients who have “No Exam Found” will be at the top of the screen and highlighted in yellow. This is followed by those who are now due for the exam with those who have most recently had the exam at the end of the list. In addition, you can anticipate how many patients will be needing preventive services in the months ahead.

Note: While this report does not contain results, it does include purchased care and the report will specify if the test was done in the direct care system or the network.

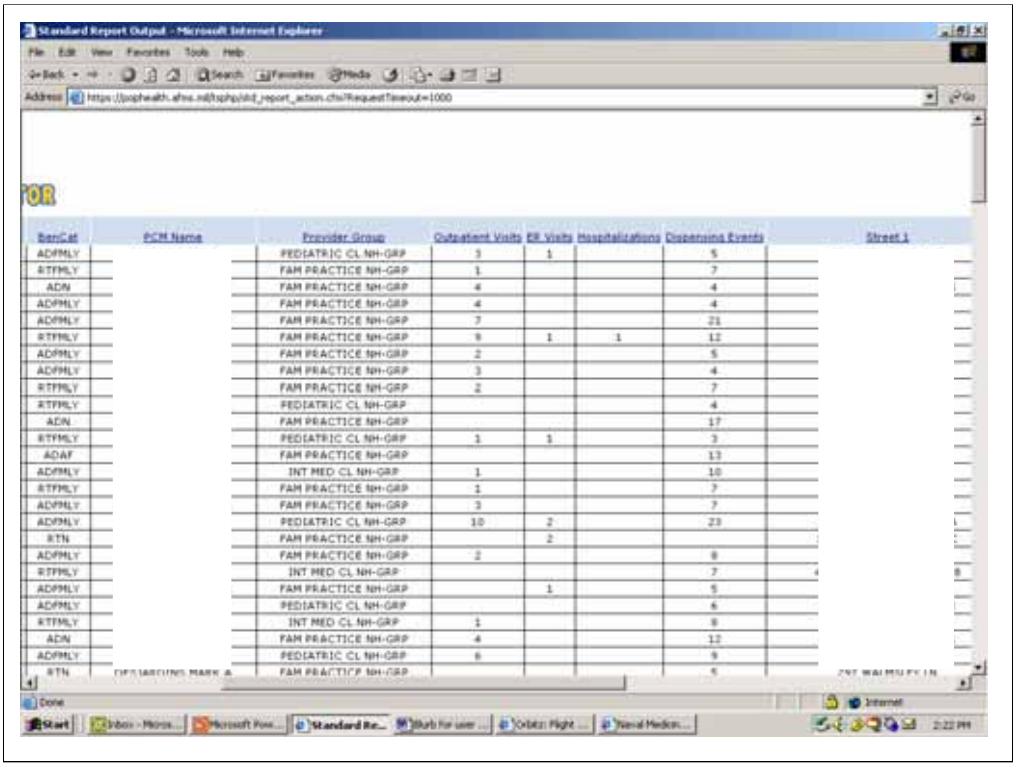



Clicking the boxes along the left allow certain notations on the record, to help in tracking your patients. This does not change the record in CHCS.

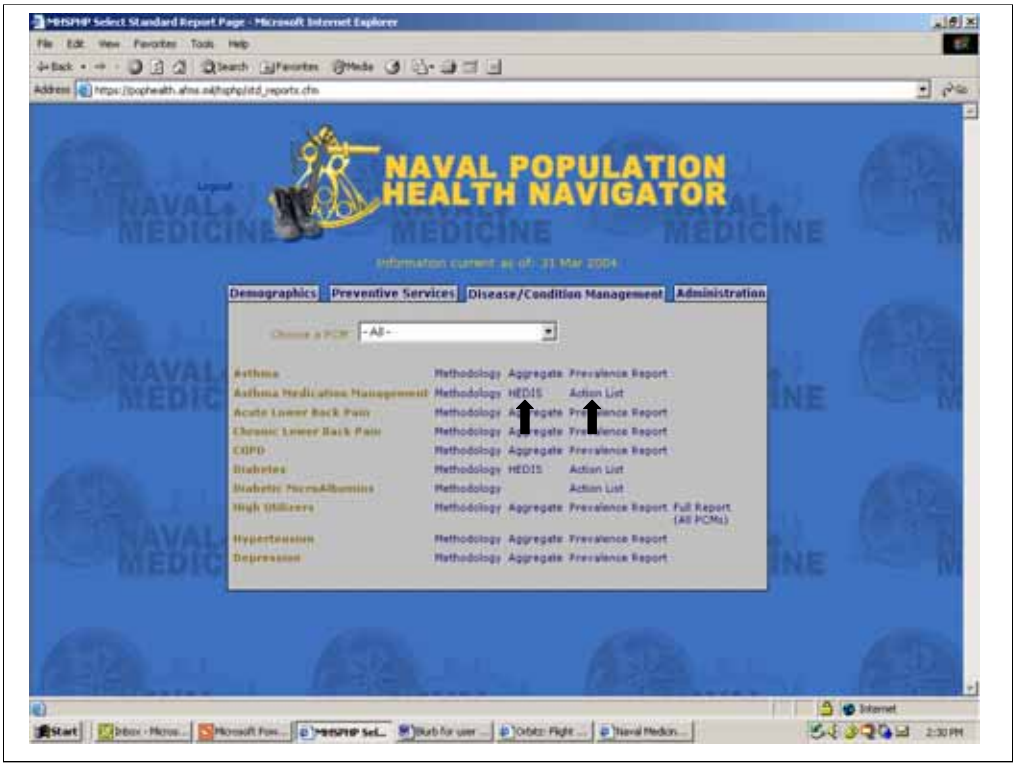
# Disease/Condition Management



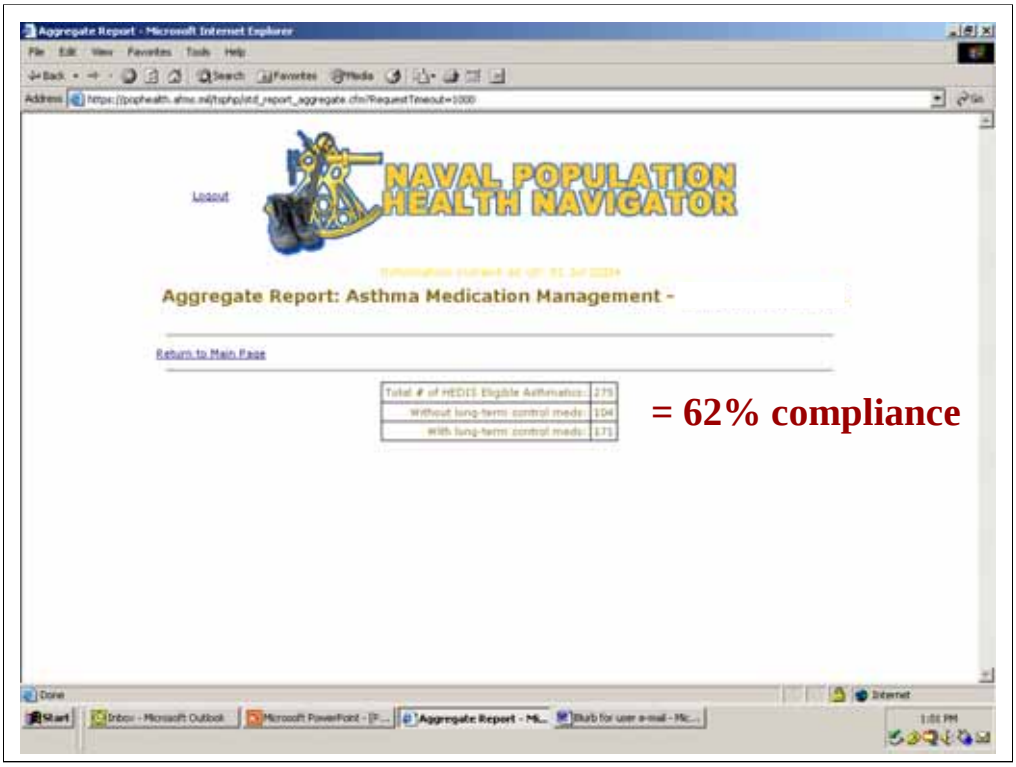

There are two files for Asthma….a Prevalence Report and Medication Management. Again, the Methods should be reviewed for a complete explanation.



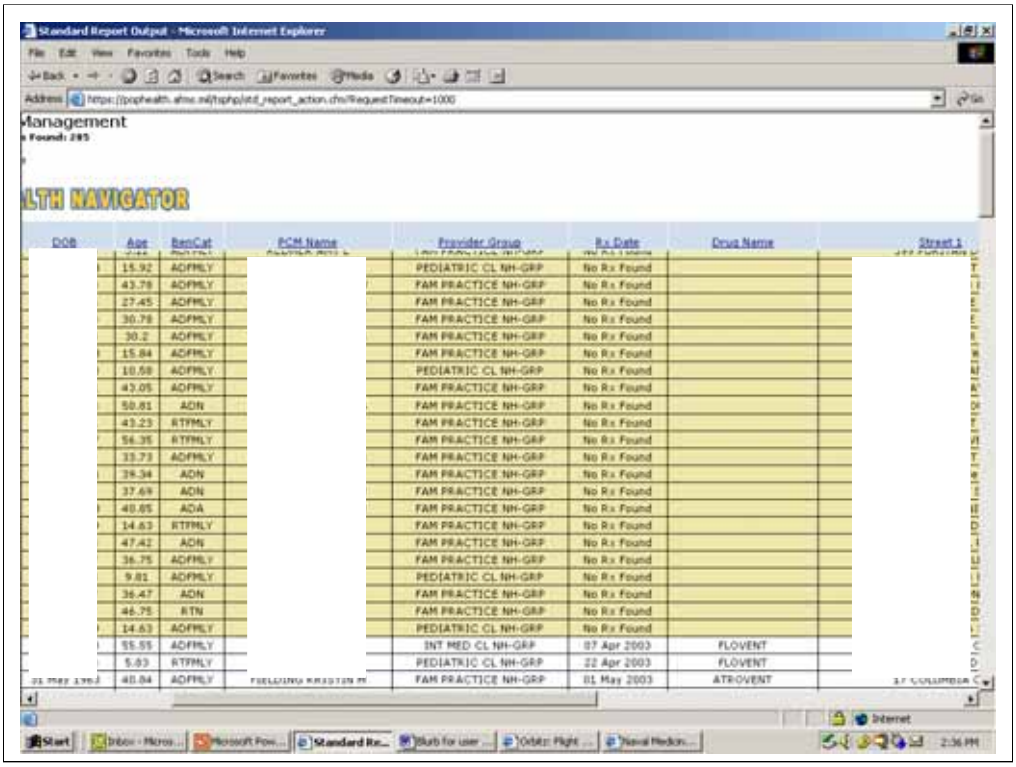

The Prevalence List gives all asthmatic patients and the number of outpatient visits (including ER) and hospitalizations for the preceding 12 months. This file is a great opportunity to determine which patients have a lot of admissions, ER visits or clinic appointments that might benefit from case management. Also, one can determine which patients have visited the ER or Hospital w/o any outpatient follow up. You can sort on any of the fields highlighted at the top, or can download the file into Excel and manipulate it more there.



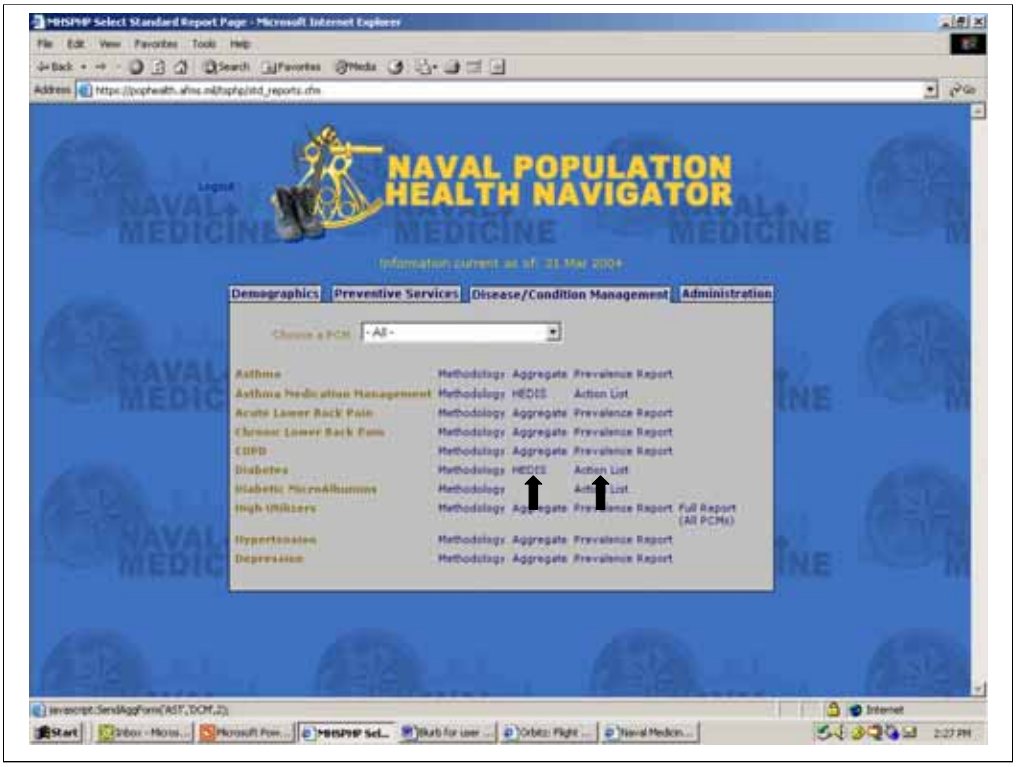

The HEDIS Medication Management is the Asthma metric in the BUMED Business Plan.



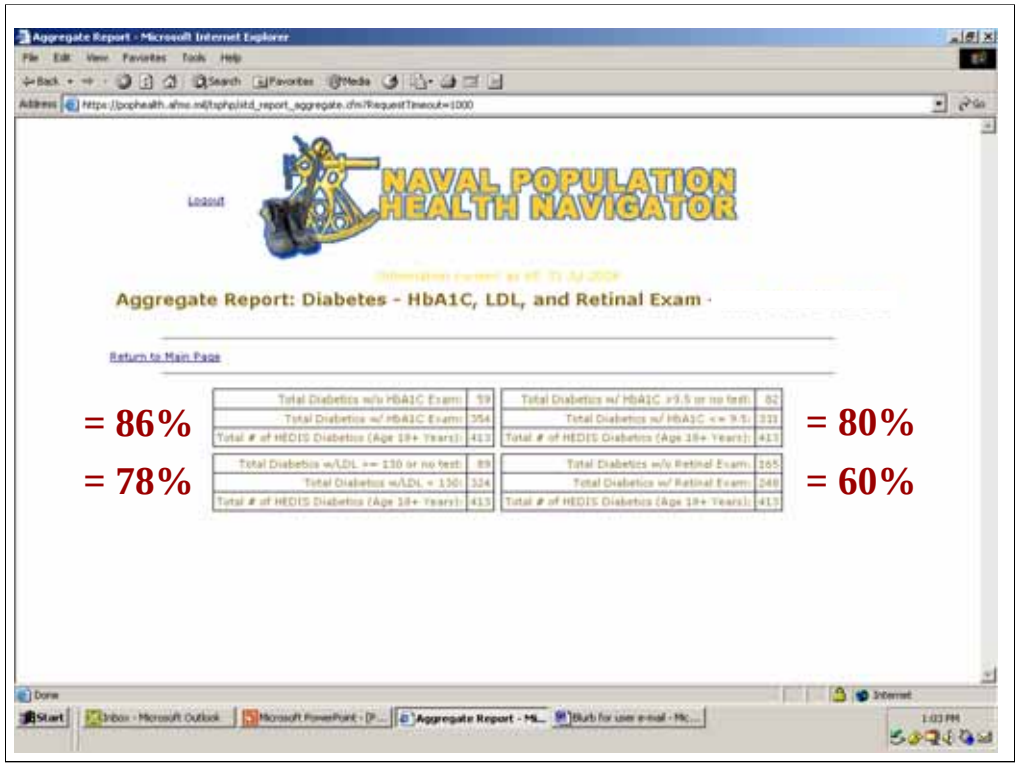

HEDIS Asthma Medication Management Metric



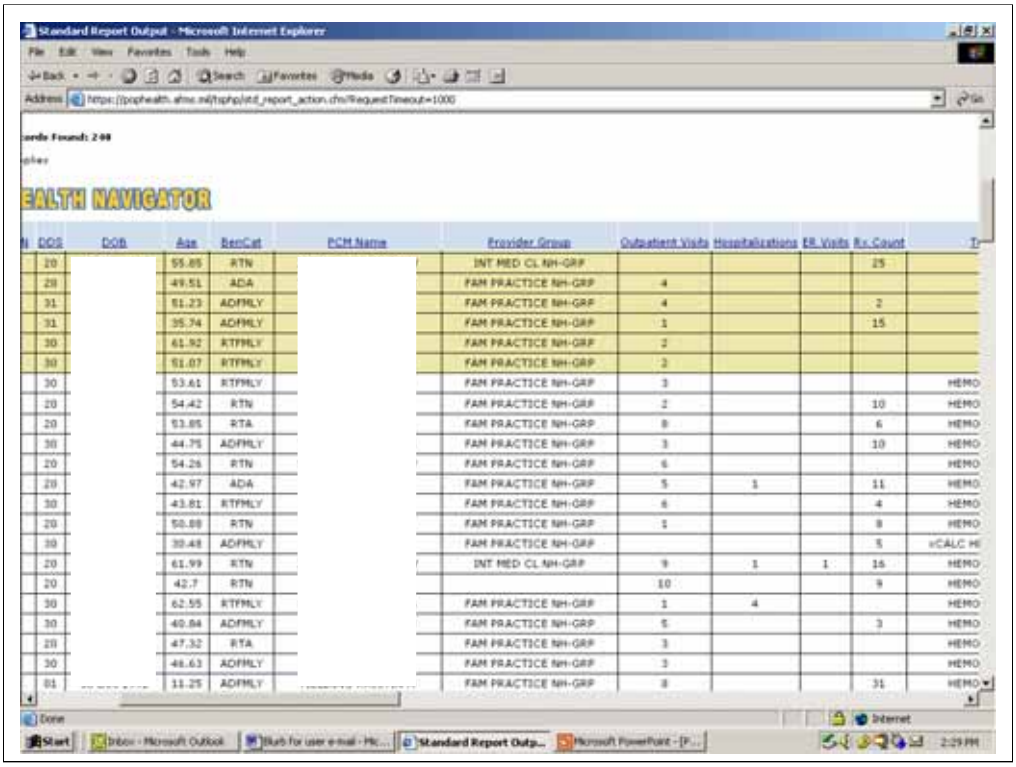

Action List. "No Rx Found" is the default and will appear at the top of the screen in yellow. If one of the specified medications is found, the name of the medication appears, but this module does not list every asthma medication that is given. There is also a column for number of prescribing events– look at the methodology on what defines a prescribing event.



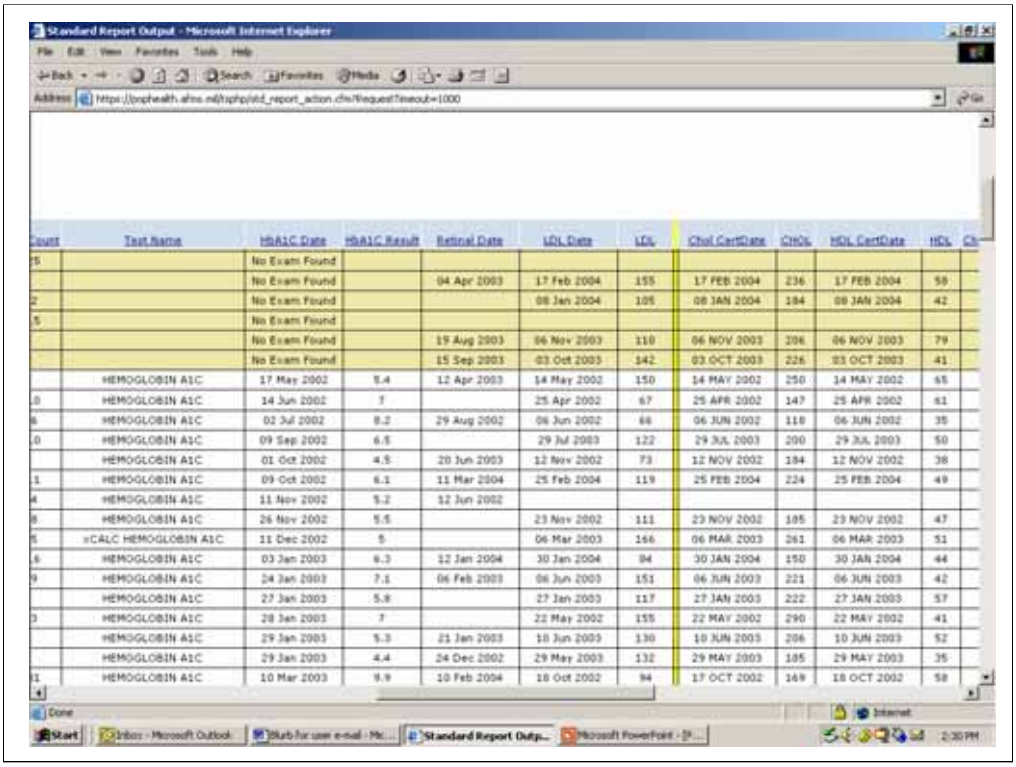

The Diabetes HEDIS is included in the BUMED Business for LDL and HbA1c.




This is the HEDIS page and contains 4 different measures.

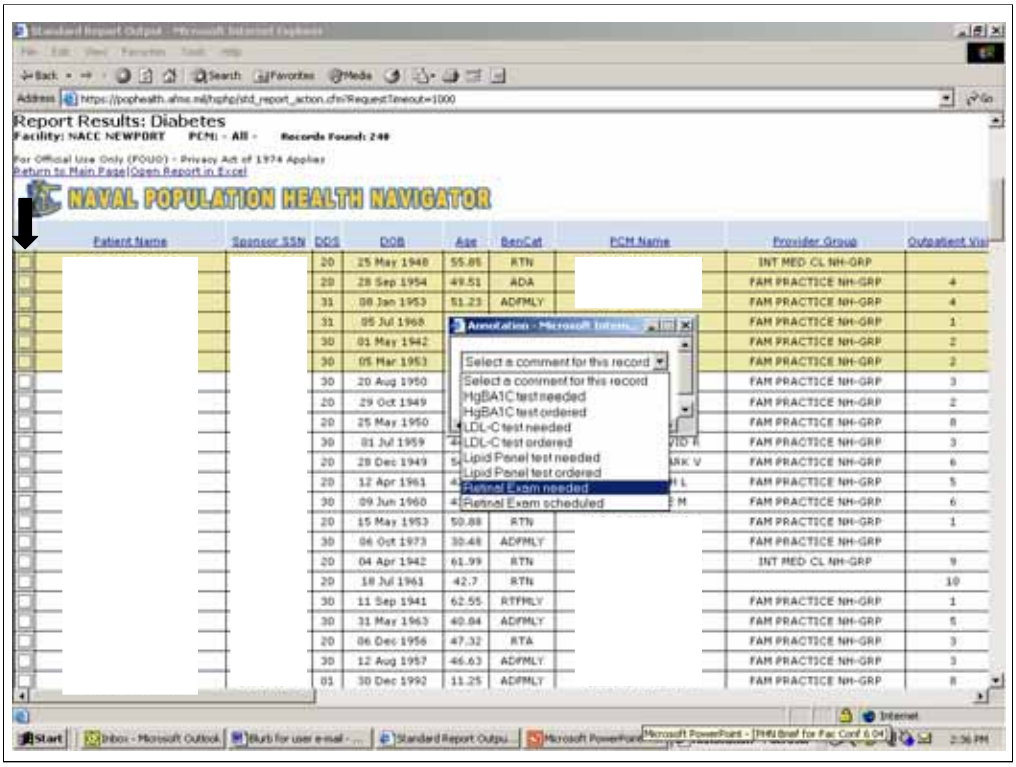



This is the diabetic action list. Again, the numbers will be greater than the HEDIS because the action list does not add a qualifier for designated enrollment period. Also, there are age constraints in HEDIS (18-75yo). The action list includes all ages. It is very important to read the methods when reviewing this data.

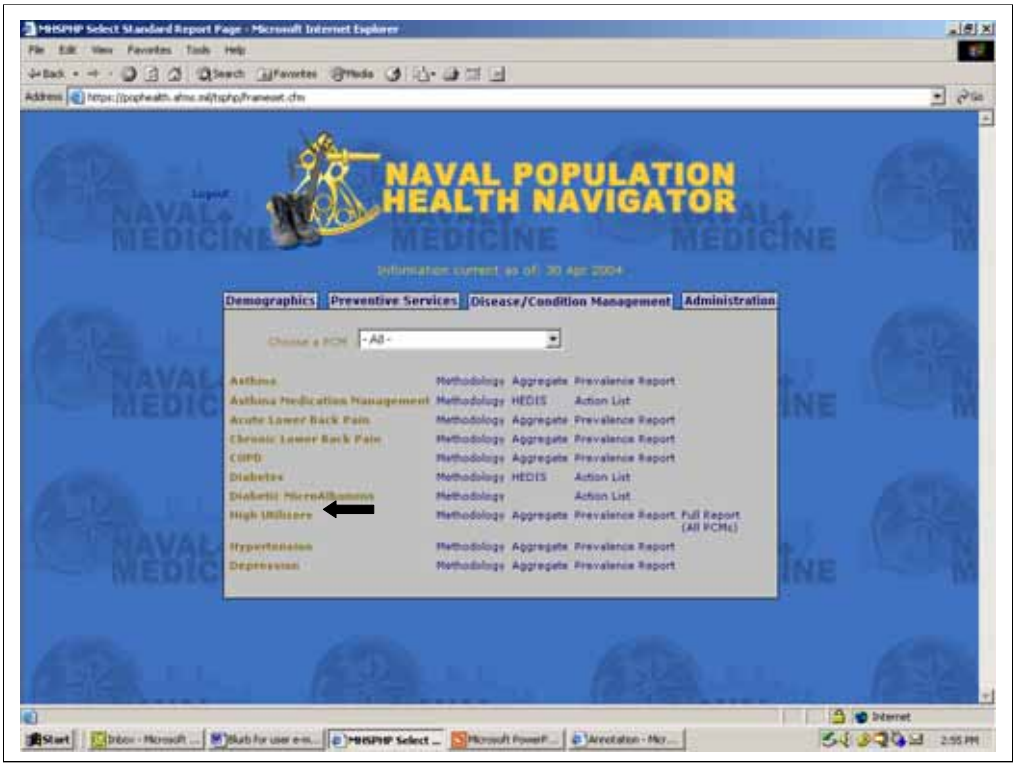



| Count | Test Name | HbA1C Date | HbA1C Result | Retinal Date | LDL Date | LDL | Chol CertDate | CHOL | HDL CertDate | HDL | Ch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75 | | No Exam Found | | | | | | | | | |
| | | No Exam Found | | 04 Apr 2003 | 17 Feb 2004 | 155 | 17 FEB 2004 | 236 | 17 FEB 2004 | 58 | |
| 2 | | No Exam Found | | | 08 Jan 2004 | 105 | 08 JAN 2004 | 184 | 08 JAN 2004 | 42 | |
| 5 | | No Exam Found | | | | | | | | | |
| | | No Exam Found | | 19 Aug 2003 | 06 Nov 2003 | 110 | 06 NOV 2003 | 206 | 06 NOV 2003 | 79 | |
| | | No Exam Found | | 15 Sep 2003 | 03 Oct 2003 | 142 | 03 OCT 2003 | 226 | 03 OCT 2003 | 41 | |
| | HEMOGLOBIN A1C | 17 May 2002 | 5.4 | 12 Apr 2003 | 14 May 2002 | 150 | 14 MAY 2002 | 250 | 14 MAY 2002 | 65 | |
| 0 | HEMOGLOBIN A1C | 14 Jun 2002 | 7 | | 25 Apr 2002 | 67 | 25 APR 2002 | 147 | 25 APR 2002 | 61 | |
| 6 | HEMOGLOBIN A1C | 02 Jul 2002 | 8.2 | 29 Aug 2002 | 06 Jun 2002 | 68 | 06 JUN 2002 | 118 | 06 JUN 2002 | 35 | |
| 0 | HEMOGLOBIN A1C | 09 Sep 2002 | 6.5 | | 29 Jul 2003 | 122 | 29 JUL 2003 | 200 | 29 JUL 2003 | 50 | |
| | HEMOGLOBIN A1C | 01 Oct 2002 | 4.5 | 20 Jun 2003 | 12 Nov 2002 | 73 | 12 NOV 2002 | 184 | 12 NOV 2002 | 38 | |
| 1 | HEMOGLOBIN A1C | 09 Oct 2002 | 6.1 | 11 Mar 2004 | 25 Feb 2004 | 119 | 25 FEB 2004 | 224 | 25 FEB 2004 | 49 | |
| 4 | HEMOGLOBIN A1C | 11 Nov 2002 | 5.2 | 12 Jun 2002 | | | | | | | |
| 8 | HEMOGLOBIN A1C | 26 Nov 2002 | 5.5 | | 23 Nov 2002 | 111 | 23 NOV 2002 | 185 | 23 NOV 2002 | 47 | |
| 5 | =CALC HEMOGLOBIN A1C | 11 Dec 2002 | 5 | | 06 Mar 2003 | 166 | 06 MAR 2003 | 261 | 06 MAR 2003 | 51 | |
| 6 | HEMOGLOBIN A1C | 03 Jan 2003 | 6.3 | 12 Jan 2004 | 30 Jan 2004 | 84 | 30 JAN 2004 | 150 | 30 JAN 2004 | 44 | |
| 9 | HEMOGLOBIN A1C | 24 Jan 2003 | 7.1 | 06 Feb 2003 | 06 Jun 2003 | 151 | 06 JUN 2003 | 221 | 06 JUN 2003 | 42 | |
| | HEMOGLOBIN A1C | 27 Jan 2003 | 5.8 | | 27 Jan 2003 | 117 | 27 JAN 2003 | 222 | 27 JAN 2003 | 57 | |
| 3 | HEMOGLOBIN A1C | 28 Jan 2003 | 7 | | 22 May 2002 | 155 | 22 MAY 2002 | 290 | 22 MAY 2002 | 41 | |
| | HEMOGLOBIN A1C | 29 Jan 2003 | 5.3 | 21 Jan 2003 | 10 Jun 2003 | 130 | 10 JUN 2003 | 206 | 10 JUN 2003 | 52 | |
| | HEMOGLOBIN A1C | 29 Jan 2003 | 4.4 | 24 Dec 2002 | 29 May 2003 | 132 | 29 MAY 2003 | 185 | 29 MAY 2003 | 35 | |
| 1 | HEMOGLOBIN A1C | 10 Mar 2003 | 9.9 | 10 Feb 2004 | 18 Oct 2002 | 94 | 17 OCT 2002 | 169 | 18 OCT 2002 | 58 | |

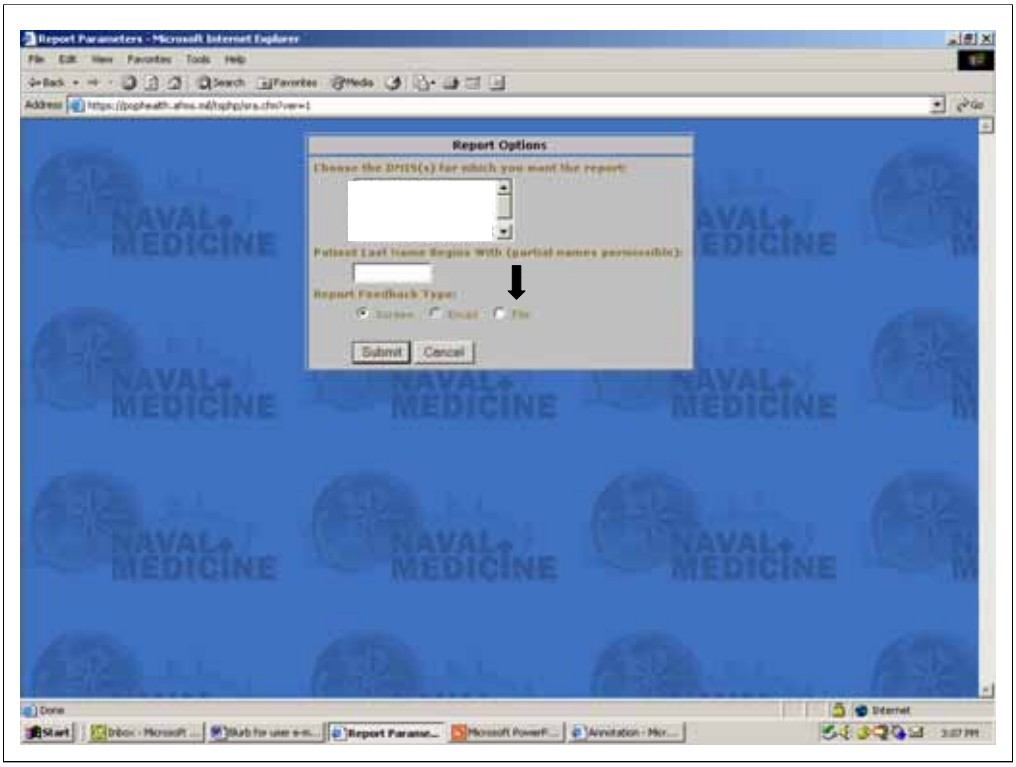
Action list….continued, provides you all the most recent date and values for A1C, retinal exams, and lipid profile. You can use this list to sort or analyze your compliance for A1C or LDL different than that given for the HEDIS metric (e.g. %A1C <7.0, %LDL< 100).



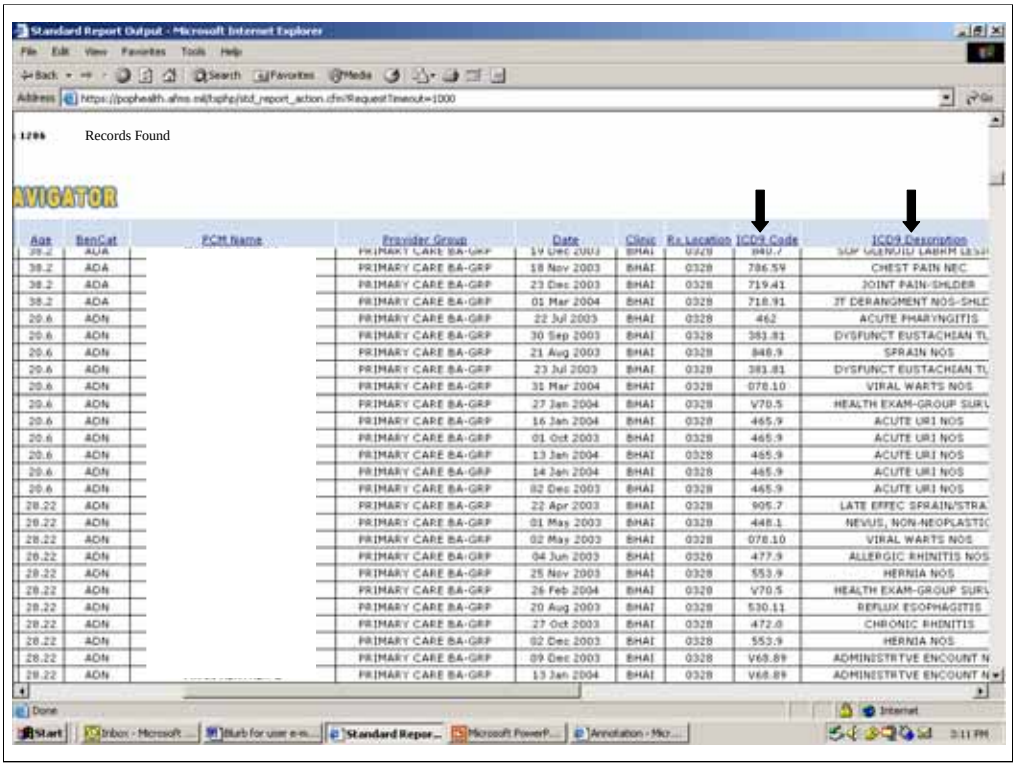

Annotations can be added by clicking the box to the left of the patients name




High utilizers is a very useful tool for case managers. This field lists every visit for each patient with over 10 visits to certain clinics (full list in Methods). It is a large file so the "full report" can be selected in Zip format. You can also pull the report by provider…




Or by parent or child DMIS, and you can have the report sent to your file (Administration tab under Generated Reports but it still takes a long time to open when you get it so recommend requesting the Zip version, depending on the size of your facility.)




This report pulls from all MTFs but not purchased care. The DMIS is shown for the clinic where the visit occurred. ICD-9 Code and Description for each visit is shown.

## Required reporting of Clinical Metrics

# Population Health Navigator

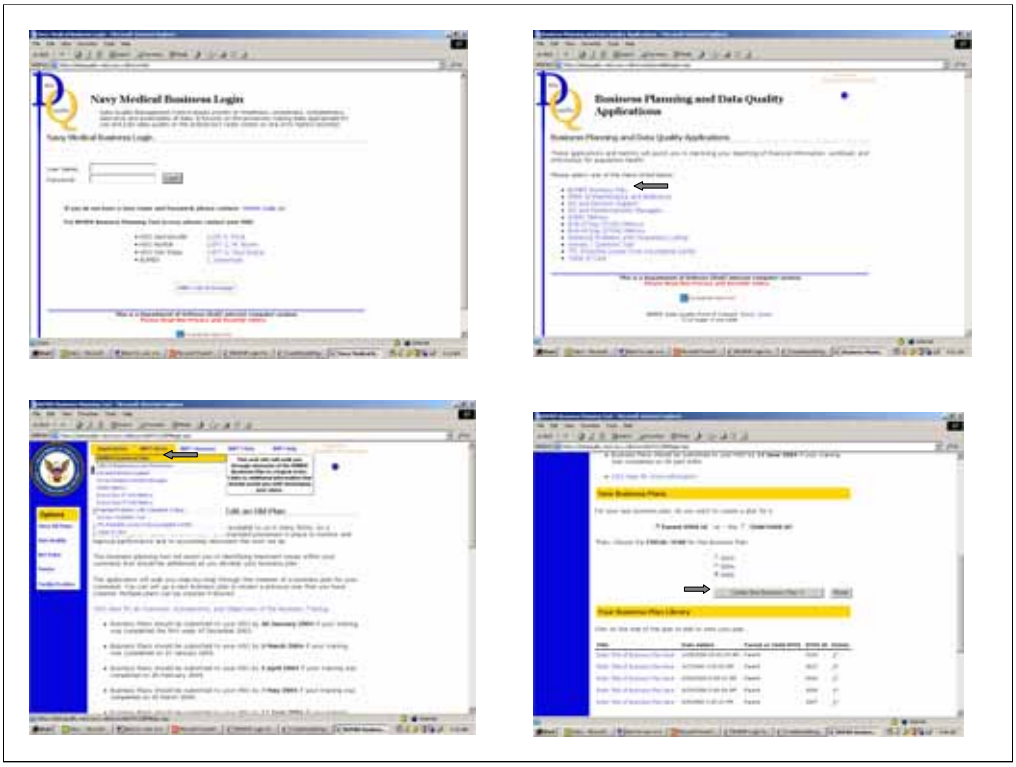
- BUMED Business Plan and BUMED Note (6310) requires monitoring and reporting of:
  - Diabetes patients (age 18-75) with hemoglobin A1c ≤ 9.5%
  - Diabetes patients (age 18-75) with LDL < 130mg/dl
  - Asthma patients (age 5-56) on long term medications
  - Female patients (age 52-69) with current mammogram
- Data from HEDIS® metrics in PHN
- Doesn't prevent the use of other registries or databases, but only PHN data counts.

BUMED Business Plan. You may follow the steps on the next few slides so you can see the BUMED Business Plan. You can also go directly to the Population Health site by logging onto https://dataquality.med.navy.mil/reconcile/pophealth

## Comparing Health Care Delivery

# Population Health Navigator

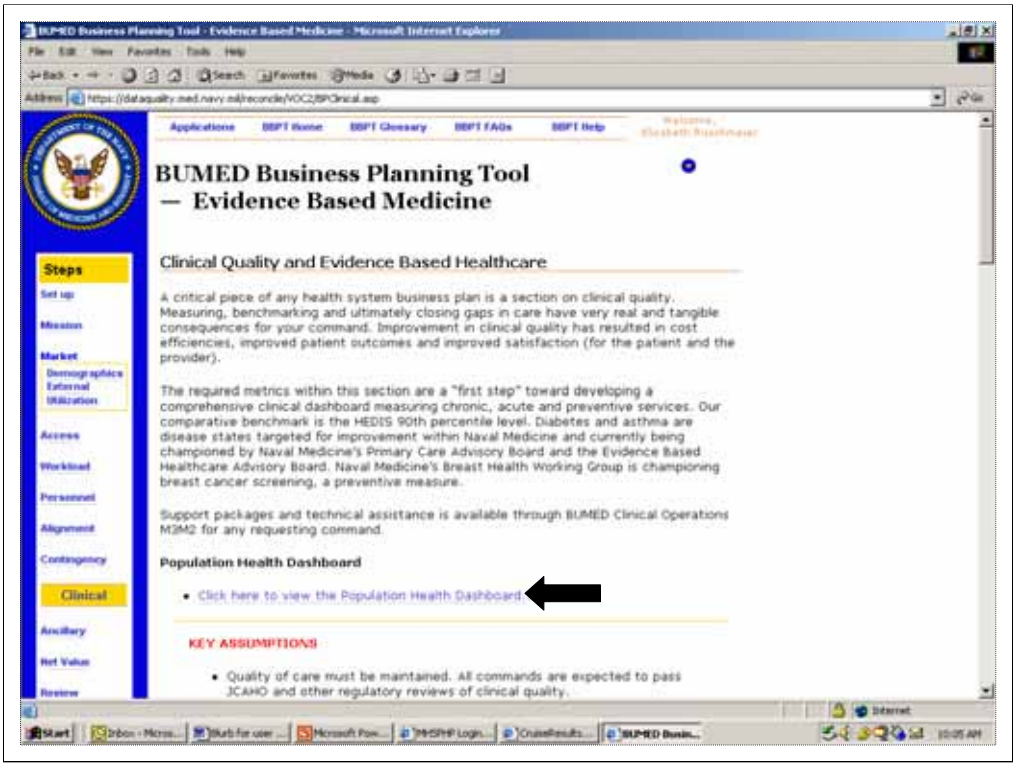
- BUMED Business Plan states that clinical goal is to perform greater than HEDIS® 90th percentile.
- PHN Dashboard for specific required metrics
  - NEHC and NMIMC collaboration
  - Displayed by command, drill down to clinics
  - Compares to other clinics/MTFs, Navy averages, HEDIS® 50th and 90th percentiles
  - Provides denominators, values
  - https://dataquality.med.navy.mil/reconcile/pophealth
  - Also available via NEHC webpage, and NMO as resource kit



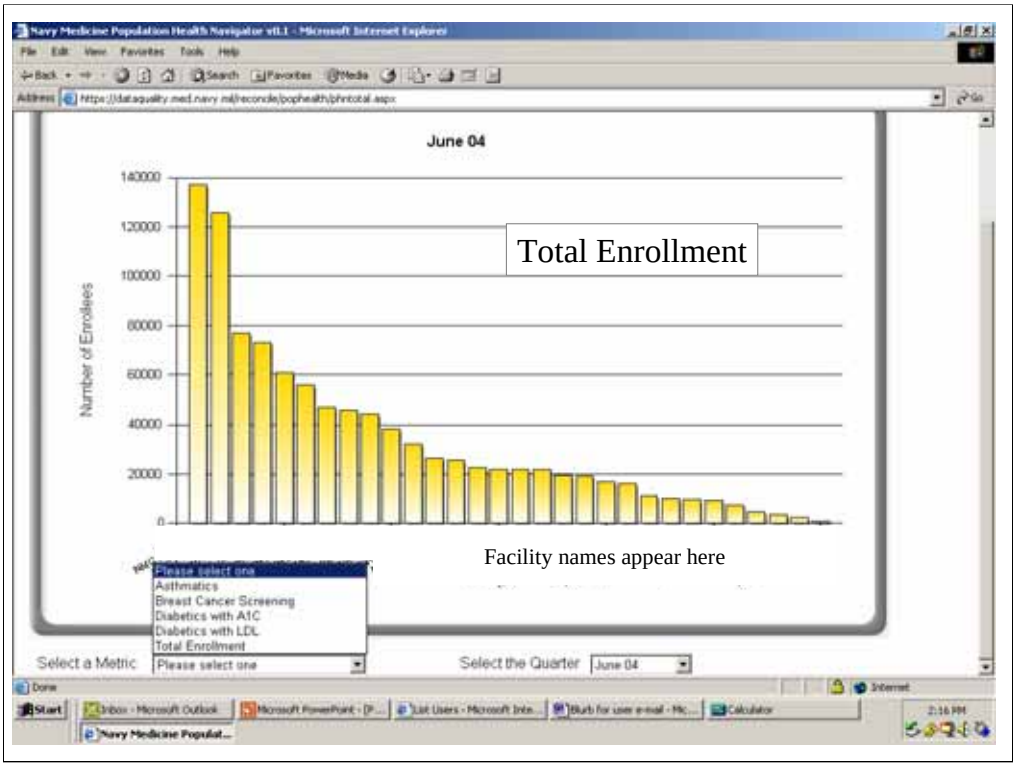

The next two slides have the steps you will need to follow to get to the clinical metrics….

BUMED Business Planning Tool
Select a facility

BUMED Business Planning Tool
— Evidence Based Medicine

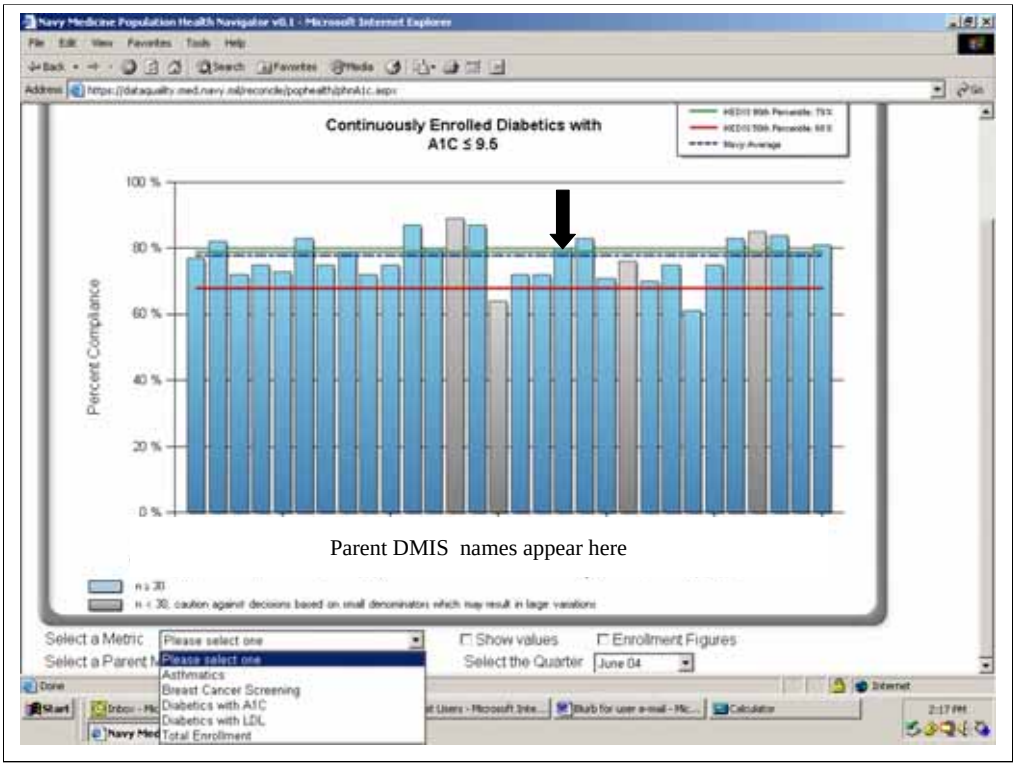



Within the BUMED Business Plan, there is also a link to the Population Health Dashboard.

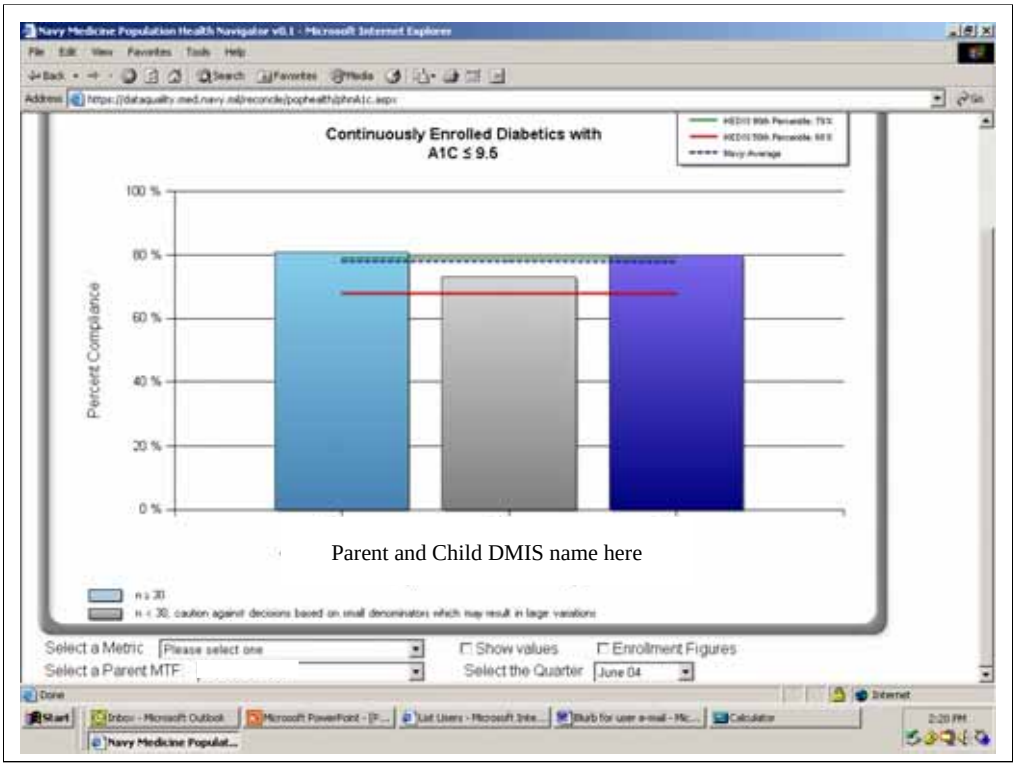



This is a slide displaying total MTF enrollment (of TRICARE Prime enrollees). Many commands see many more patients because not all patients (e.g. retirees) are in TRICARE Prime.

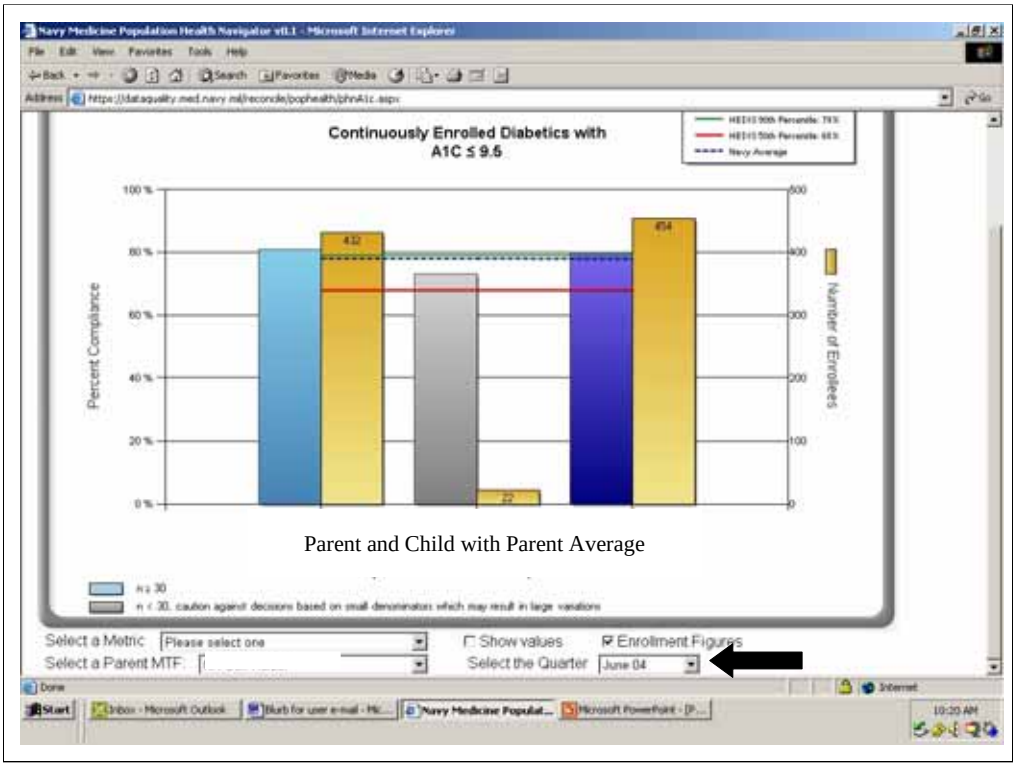
You can go to the lower left and select a metric




This is HbA1c across Navy Medicine. The HEDIS goals and Navy Medicine average are shown




If you select a facility, the percentiles for parent and child DMIS' will be shown




Parent and Child with Parent Average

If you select the Enrollment figures, it will show the total number enrolled in the metric shown in gold along with percent compliance

Important links on the Navy Environmental Health Center (NEHC) PHN webpage

Exercise Part 1

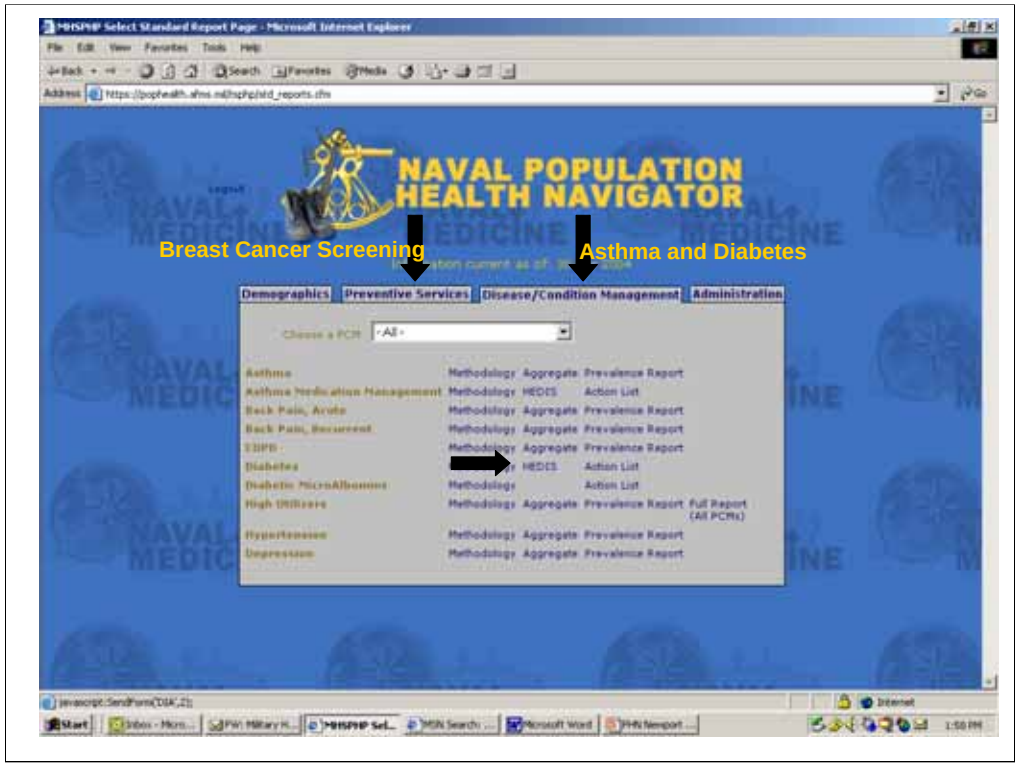
## Population Health Navigator

**https://pophealth.afms.mil**

- Look up your clinic's data for the Clinical Metrics being used in the BUMED Business Plan (HEDIS®)
  - Breast Cancer Screening
  - Asthma Medication
  - HbA1c ≤ 9.5
  - Diabetic LDL < 130
  - Make a note of total HEDIS® eligible diabetics

The following slides will walk you through exercises on using the PHN:

Show where to find the different fields. Preventive services for Breast Cancer Screening. Disease Management for Asthma and Diabetes.




Breast Cancer Screening found in the Preventive Services section.

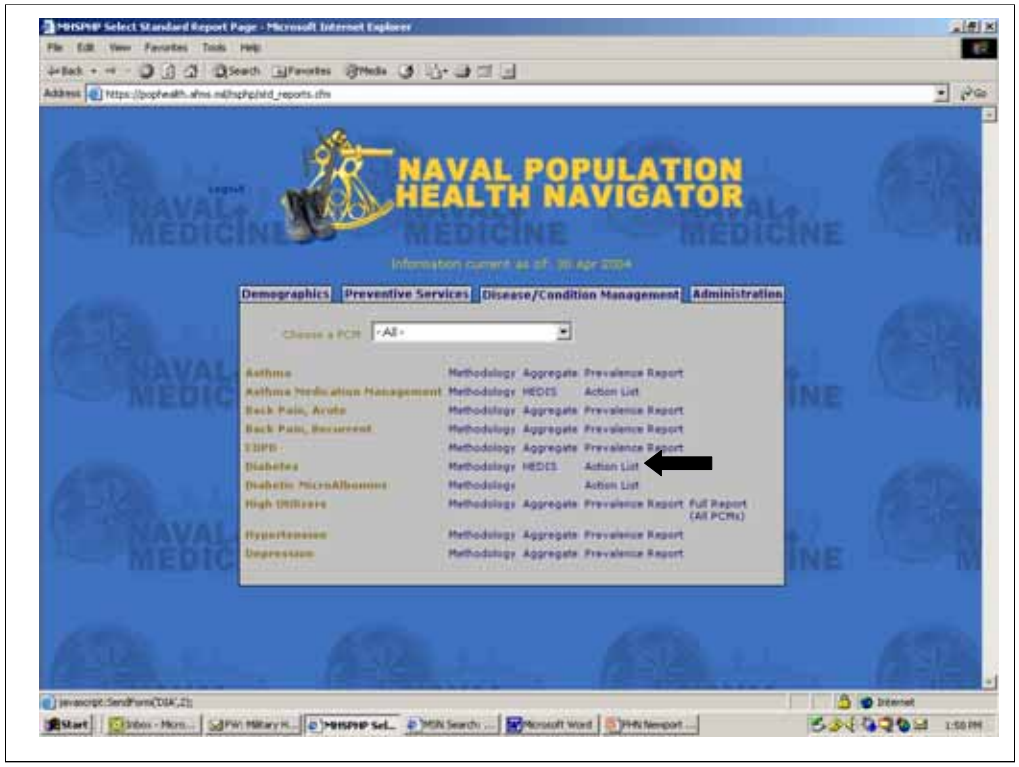
Asthma and diabetes is in the Disease/condition Management section. Select the HEDIS fields for this exercise.

Exercise Part 2

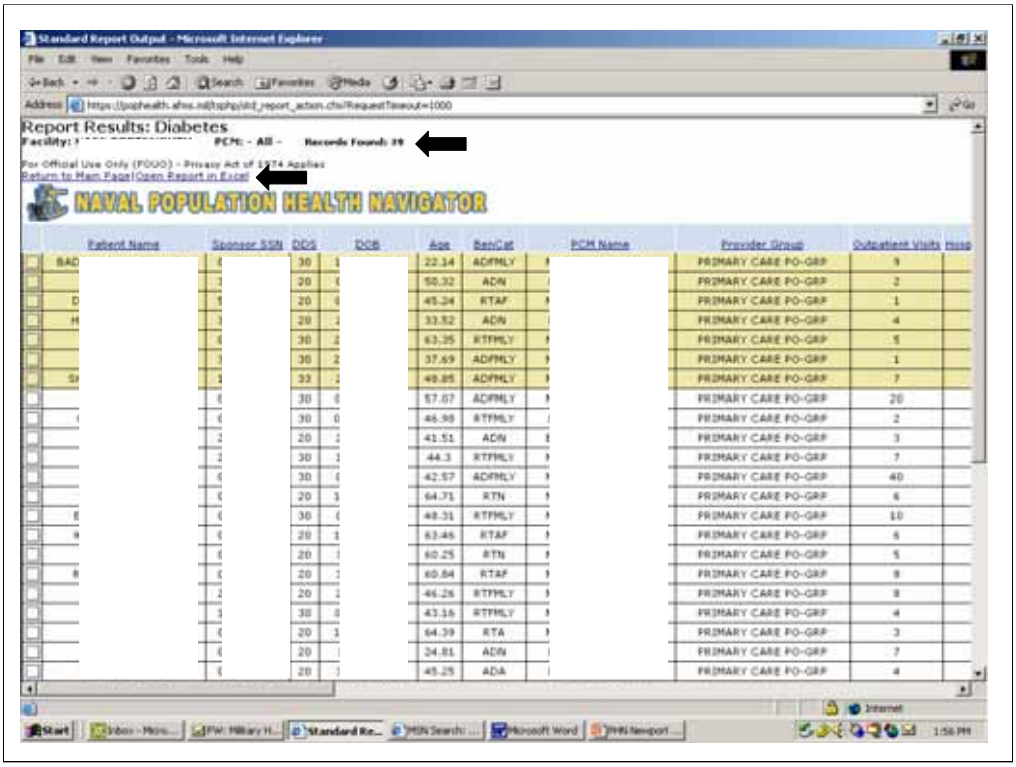
## Population Health Navigator

- Pull up Diabetes “Action List”
  - How many diabetics are on the action list?
  - How does this compare with the number of HEDIS®-eligible diabetics?
- What’s the difference between these 2 groups?

The number of diabetics on the Action List should be higher than the HEDIS eligible because the Action List is for all diabetics regardless of age or enrollment period. The HEDIS diabetics must meet enrollment criteria for one year and be 18 years of age or greater.




This time you will select the action list




Total number is found on top of page

To sort the data, you can either sort within the program or will have to open the report in Excel.

## Exercise Part 3

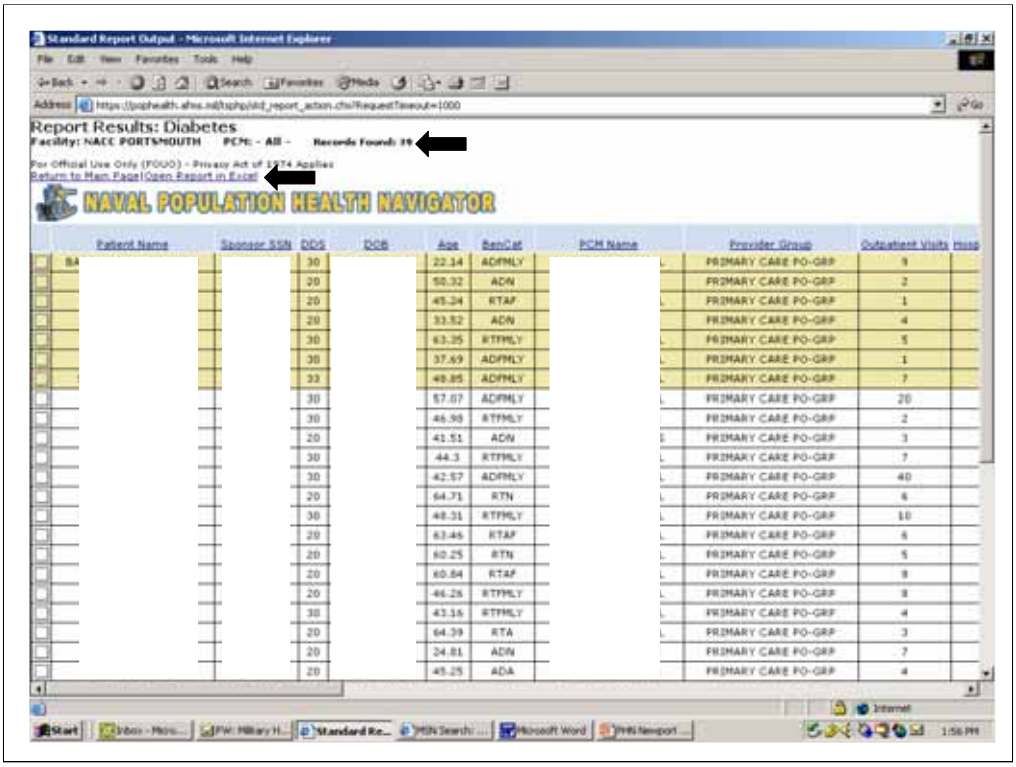
## Population Health Navigator

- What % of diabetics on the action list has:
  - No HbA1c?
  - HbA1c greater than 1 year?
  - HbA1c greater than 9.5?  Less than 7.0?
  - Need retinopathy screening exams?

(Use the calculator on the computer when figuring)

You will need to use Excel to sort the data for the various categories.  A sample of how to use Excel is provided for HbA1c.  You will need to repeat the sorting process for dates and retinopathy.

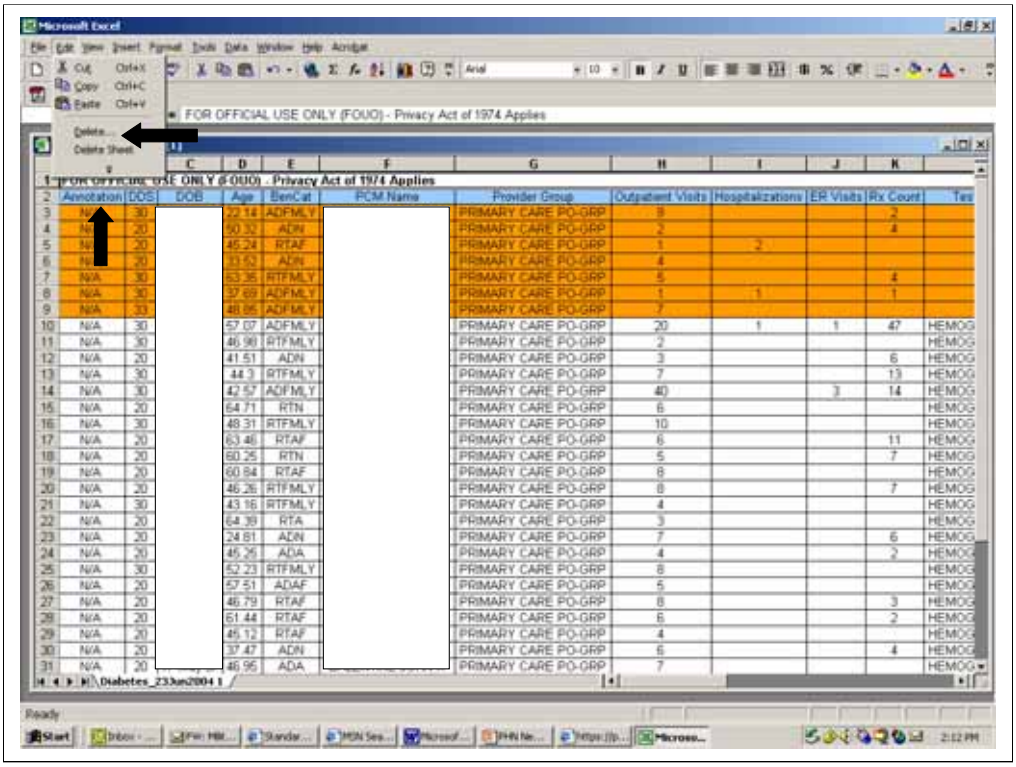
HINT:  The data for A1C is already sorted for those without any values.  Then, you will notice that they are then sorted by default for the most oldest dates of the last A1C.  So really, you only have to run 2 different sort operations.  One for value of the A1C, and one for expired retinopathy exams.




Total are listed on top of screen

Click on “Open Report in Excel”

REMEMBER THAT YOUR DENOMINATOR IS 39 PATIENTS….



To get rid of rows you don't need

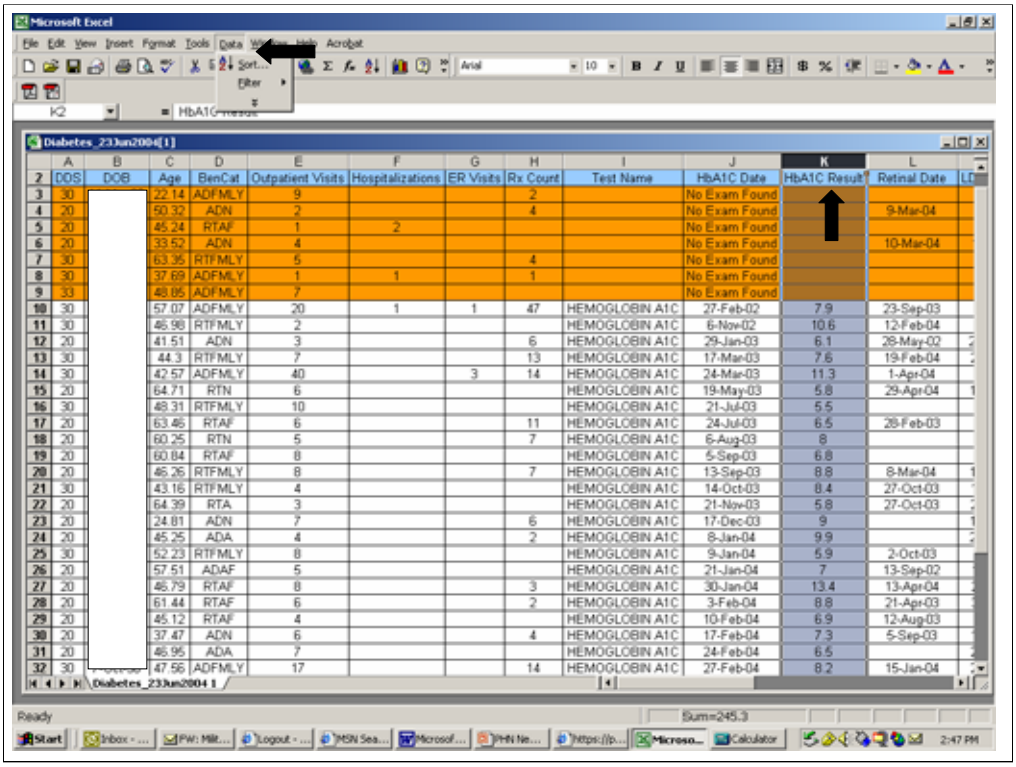
✓Click on the heading of the column you want to delete

✓Select "Edit" from the top

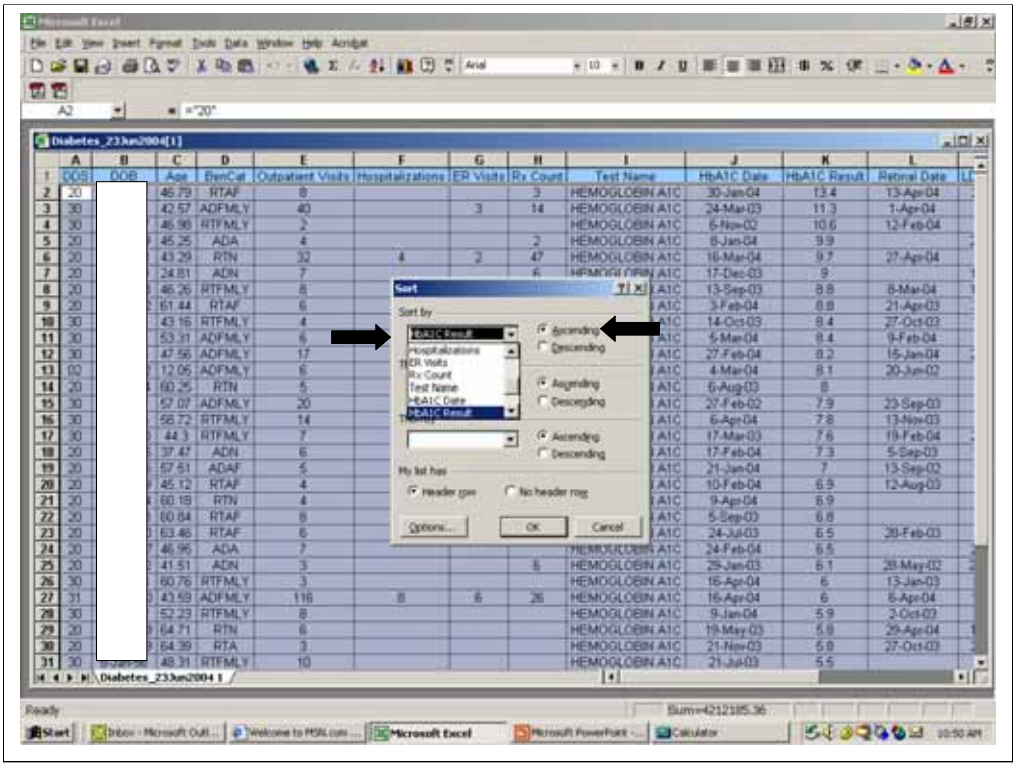
✓Select Delete

✓Select Entire column (When it shows up)

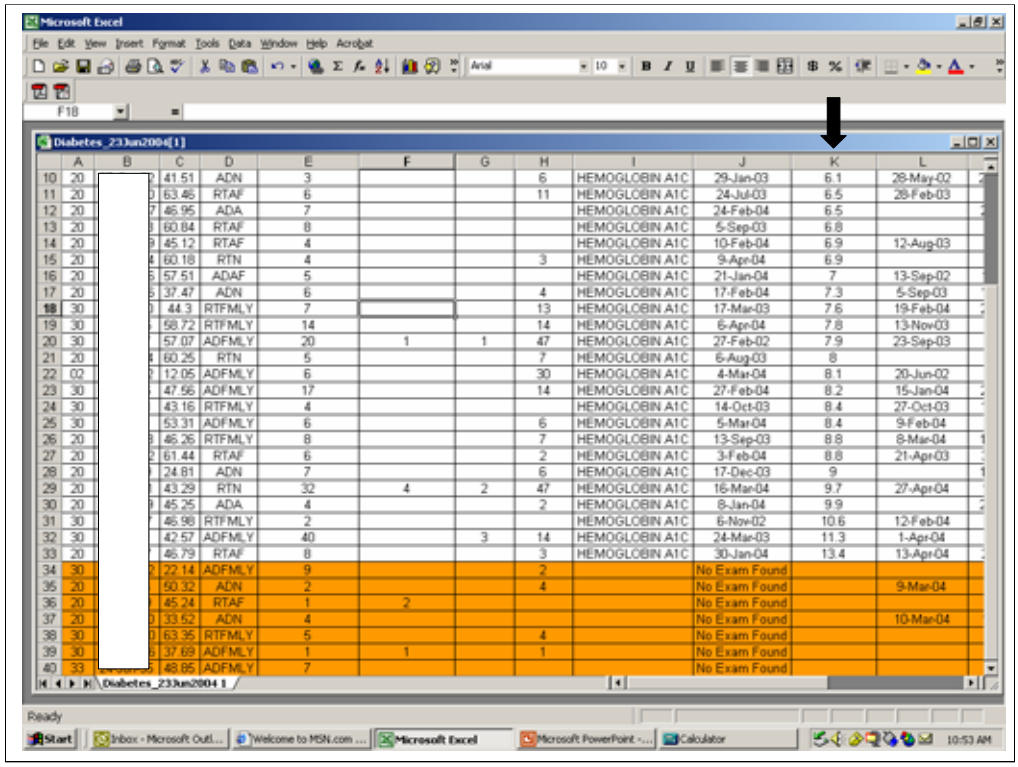
✓I have already deleted several rows with patient identifiers in them




Click on column with HbA1c and select Data and Sort




Select what you want to sort and whether you want ascending or descending. I selected ascending so all my high ones will come to the bottom along with those who haven't had an exam.




**Solution #1:** What percentage of patients don't have an A1C? 7/39 = 17.9%

**Solution #3a:** What percentage of patients have an A1C >9.5%? 5/39 = 12.8%

**Solution #3b:** What percentage of patients have an A1C <7%?

Whereas HEDIS used 9.5 as the metric, the standard of care aims for a HbA1c <7. Thus, 17 patients are now out of standards using the more strict standard of care defined as A1C <7%. That would equate to about 44% of patients out of standard. 17(out of standard)/39 (total patients) = .435 or 44%. If you add the 7 that didn't have any HgA1c at all it would be 24/39= .615 or 62% noncompliance. Or you could have figured how many were under 7% (22) and divide by the total population (39)…….. <u>38% compliance with A1C <7%</u>

Even though the HEDIS 9.5 is considered high, you can see that it gives you a more manageable place to start to manage your diabetic patients and lets you intervene with those most out of control first. Once you've been able to address those patients and get your process in place, then you can start working on the others.

## Exercise Part 3

# Population Health Navigator

- Open “Diabetes Action List” in Excel
- What % of diabetics on the action list has:
  - No HbA1c? (Number with no HbA1c divided by total diabetics)
  - HbA1c greater than 9.5? Less than 7.0? (Number with HbA1c < 7 divided by total diabetics)
  - HbA1c greater than 1 year? (Number > 1 year divided by total diabetics)
  - Need retinopathy screening exams? (Number with no retinal screening divided by total diabetics)

(Use the calculator on the computer when figuring)

You would repeat the sorting process with dates to determine who is out of standard for HbA1c greater than a year.

Also, sort for retinopathy screening. The methodology has already taken into consideration those at low risk (based on HbA1c result) who need an exam every 2 years and those at high risk (based on HbA1c result) who need an annual exam.

## Exercise Lessons

# Population Health Navigator

- What questions arise during this exercise related to:
  - Coding
  - Enrollment
  - Process

Some items to review:

Coding…are there coding errors that make patients appear as diabetics when they aren't? Gestational diabetes,spouse attending class and getting coded for diabetes, improper coding of eye exams or provider doing exam

Enrollment…do you have enrollees who get most of their healthcare through another health system? If so, results won't show up in the PHN. Maybe nothing you can do but be aware of it.

Enrollees who move and never transfer their enrollment to new location?

Enrollment to PCM, or PCM group. Is it accurate? Are there a lot of patients with a PCM? Are there patients without a PCM, or enrolled to an old provider that is no longer at that facility?

Process….how does your clinic manage their patients? Is it random when the patient decides to come in for an appt or do you have a plan for patient management? Would Clinical Practice Guidelines help? What about nurse managed clinics? Is the entire healthcare team involved in the care of the patient? The clinic must address WHO is going to check the PHN, distribute the lists, call the patients, order the labs/studies, etc.

## Exercise Action Items

## Population Health Navigator

- Actions that might be considered
  - Review records to confirm accuracy
  - Have staff contact patients for needed tests/exams/follow-up
  - Send out reminders to patients
  - Consider case management for designated patients
  - Consider referral to Nutritionist, Pharmacist
  - Consider implementation of DoD/VA CPG
  - Demand forecast for services (Ophthalmology exams)
- Use the Health Care Team

Here are some ideas in how to leverage PHN technology and Population Health principles to its fullest.

Point of Contact

## Population Health Navigator

To obtain an account:

- Ms E. M. Ruschmeier

**E-mail:** emruschmeier@us.med.navy.mil

**Phone: (202) 762-3139**

Clinic Management Course

# Population-Based Analysis

using the

# Population Health Navigator (PHN)